

DATE: 3 March, 2023

PCN #: 2618

PCN Title: Qualification of Additional Wafer Source, and Lead Frame Structure and Mold Compound Type Changes for Select Discrete Automotive Products

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request immediately. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team

Rel Date: 6/16/2021



PRODUCT CHANGE NOTICE

PCN-2618 REV 1

Rel Date: 6/16/2021

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
3 March, 2023	3 June, 2023	Discrete - Automotive	Wafer Fab Material, Assembly Material	2618

TITLE

Qualification of Additional Wafer Source, Lead Frame Structure, and Mold Compound Type Changes for Select Discrete **Automotive Products**

DESCRIPTION OF CHANGE

This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes Incorporated has qualified Diodes internal BCD (Shanghai) Micro-Electronics Limited (SFAB2) in Shanghai, China as an additional wafer source for select automotive products listed below, and an enhanced lead frame structure and mold compound type for PowerDI-5 packaged products as listed below.

Full electrical characterization and high reliability testing has been completed on representative part numbers to ensure no change to device functionality or electrical specifications in the datasheet. Refer to the attached qualification report embedded in this file (to view, download this PCN file then open it with a PDF viewer to see the attached qual report).

There will be no change to the Form, Fit, or Function of affected products.

IMPACT

No change in datasheet parameters and product performance

PRODUCTS AFFECTED

Table 1 – Affected part list to add SFAB2 as additional wafer source

Table 2 - Affected part list to add SFAB2 as additional wafer source, and change lead frame and mold compound for PowerDI-5 package

WEB LINKS							
Manufacturer's Notice:	https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/						
For More Information Contact:	https://www.diodes.com/about/contact-us/contact-sales/						
Data Sheet:	https://www.diodes.com/catalog/						
DISCLAIMER							

Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.



Table 1: Affected part list to add SFAB2 as additional wafer source											
SBR02U100LPQ-7	SBR1045CTLQ-13	SBR15U100CTLQ-13	SBR3045CTBQ-13	SBR3U40P1Q-7	SBR6100CTLQ-13						
SBR02U100LPQ-7B	SBR1045D1Q-13	SBR20M45D1Q-13	SBR30A45CTBQ-13	SBR3U60P1Q-7	SBR660CTLQ-13						
SBR0560S1Q-7	SBR10U45D1Q-13	SBR2A40P1Q-7	SBR30A60CTBQ-13								

Table 2: Affecte	ed part list to add SFAB2 as	additional wafer source, an	d change lead frame and	mold compound for Powe	erDI-5 package
SBR1045SP5Q-13	SBR10U200P5Q-13	SBR10U45SP5Q-13	SBR12U100P5Q-13	SBR8U60P5Q-13	SBR8U60P5Q-13D
SBR10A45SP5Q-13	SBR10U200P5Q-13D	SBR10U45SP5Q-13D	SBR12U100P5Q-13D		

Rel Date: 6/16/2021

Description: SFAB2 8 inch wafer qual for SBR auto produc

	NCORPO	RATED						Description: SFAB2 8 inch wafer of	luui ioi obit															
	Category					Qual Device 1-1st lot		Qual Device 1-2nd lot		Qual Device 1-3rd lot		QBS Source Device 1	QBS Source Device 2		QBS Source Device 3		QBS Source Device 4		QBS Source Device 5		QBS Source Device 6		QBS Source Device 7	
	Product	Part Number				SBR10U200P5Q-13		SBR10U200P5Q-13		SBR10U200P5Q-13		SBR10U45SP5-13	SBR3U40P1-7		SBR8M100P5Q-13		SBR02U100LP-7		SBR0560S1Q-7		SBR20M45D1Q-13		SBR30A45CTBQ-13	
	Assembly	Package Type				PowerDI5 6.5*3.97*1.10mm		PowerDI5 6.5*3.97*1.10mm		PowerDI5 6.5*3.97*1.10mm		PowerDi-5 6.5*3.97*1.10mm	PDI123 3.7*1.775*0.98mm		PowerDI5 6.5*3.97*1.10mm		DFN1006-2 1.0*0.6*0.5mm		SOD-123 1.55*3.7*1.06mm		TO252-3L		TO-263AB 15.24*10.16*4.44	
	Assembly Wafer	Package Size Die Name(s)			-	5.5°3.97°1.10mm SS1024200PHAQ-84-HGN	_	SS102A200PHAQ-8A-HGN		6.5°3.97°1.10mm SS102A200PHAQ-8A-HGN	_	6.5°3.97°1.10mm SS112A045PEA2-8-4C	3.7^1.775*0.98mm SS048A040PFF2-8-4C		SS082A100PGC2-8-4C		1.0°0.6°0.5mm SS014A100AGB7-8-BGN		1.55°3.7°1.06mm SS030A060AFA2-8-HGN	-	9.91*6.58*2.29mm SS124A045AFD2-8-HGN	-	15.24^10.16^4.44 SS112A045AEA2-8-HGN	
	Wafer	Die Size (W/L/Thickness) - After Saw			-	2.592 x 2.592 x 0.25 mm		2.592 x 2.592 x 0.25 mm		2.592 x 2.592 x 0.25 mm	_	2.84mm * 2.84 mm	1.24*1.24*0.25mm		2086x 2086*254 um		0.40*0.35*0.14mm		0.78*0.78*0.25mm	1	3.97*2.56*0.25mm	1	2.84*2.84*0.25mm	
	Wafer	Die Process / Technology				SBR		SBR		SBR		Standard SBR	SBR		SBR		SBR		SBR		SBR		SBR	
	Wafer	Wafer FAB/ Location				SFAB2		SFAB2		SFAB2		SFAB	SFAB2		SFAB2		SFAB2		SFAB		SFAB		SFAB	
	Wafer Wafer	Wafer Diameter Front Metal Type			ŀ	8 inch AlCu +NiAu		8 inch AlCu +NiAu		8 inch AlCu +NiAu		8 inch AlCu +NiAu	8 inch AlCu +NiAu		8 inch AlCu +NiAu		8inch AlSiCu		8inch Al-Si-Cu		8inch AlSiCu		8inch	
	Wafer	Front Metal Type Front Metal Layer Number/ Thicknes:			H	AlCu 2.5um + NiAu 1.5um / 500A	-	AlCu 2.5um + NiAu 1.5um / 500A		AICu 2.5um + NiAu 1.5um / 500A	-	AlCu 2.5um + NiAu 1.5um / 500A	AlCu 2.5um + NiAu 1.5um / 500A	_	AlCu 2.5um + NiAu 1.5um / 500A	_	AISICu/40kA	_	Al-Si-Cu/30kA	 	Al-Si-Cu/30kA	1	Al-Si-Cu/30kA	_
	Wafer	Front Solderable or Plated Metal Type / Thicknes			l l	Plated NiAu 1.5um / 500A		Plated NiAu 1.5um / 500A		Plated NiAu 1.5um / 500A		Plated NiAu 1.5um / 500A	Plated NiAu 1.5um / 500A		Plated NiAu 1.5um / 500A		NA NA		NA NA	1	NA NA	1	NA NA	
	Wafer	Front Solderable or Plated Metal Supplie				CAT		CAT		CAT		CAT	CAT		CAT		NA		NA		NA		NA	
	Wafer	Number of Poly Layers				1		1		1		1 Poly	1 Poly		1 Poly		1 Poly		1 Poly		1 Poly		1 Poly	
	Wafer Wafer	Back Metal Type (All Layers Back Metal Thickness (All Layers			ŀ	1 Poly TiNiAg		1 Poly TiNiAg		1 Poly TiNiAa		TiNiAg 1000A / 3000A / 10000A	TiNiAq 1000A / 3000A / 10000A		TiNiAg 1000A / 3000A / 10000A		TiNiAg 1000A / 3000A / 10000A		TiNiAg 1000A / 3000A / 10000A		TiNiAg 1000A / 3000A / 10000A		TiNiAg 1000A / 3000A / 10000A	
	Wafer	Back Metal Supplier			-	1000A / 3000A / 10000A		1000A / 3000A / 10000A		1000A / 3000A / 10000A	_	CAT	CAT		CAT		CAT		CAT	1	CAT	1	CAT	
	Wafer	Die Conforming Coating (Passivation)/Supplie				PETEOS (SiO2)		PETEOS (SiO2)		PETEOS (SiO2)		NA NA	NA NA		SION		NA NA		NA NA		NA NA		NA NA	
	Wafer	Die passivation thickness range				1+/-0.1um		1+/-0.1um		1+/-0.1um		NA	NA		1+/-0.1um		NA		NA		NA		NA	
	Wafer	No of masks Steps			L.	6		6		6		4	4		6		4		4		4		4	
	Assembly Assembly	Die quantity per package (e.g. single or dual dies Die Attach Method (DB Epoxy/Solder Type			H	Solder	-	Solder		Solder	-	Solder	Single Solder	_	Solder	_	Single Epoxy		Single	 	SOFT-SOLDER	1	Dual dies SOFT-SOLDER	-
	Assembly	Die Attach Material/ Supplie			l l	ES-500-SPA/EARLY SUN		ES-500-SPA/EARLY SUN		ES-500-SPA/EARLY SUN		NC-SMQ51SC/INDIUM	ES-500-SPA / Early Sun		NC-SMQ51SC / Indium		QMI519/HENKEL		84-1LMISR4	1	Pb92.5Sn5Ag2.5/HERAEUS	1	Pb92.5Sn5Ag2.5/HERAEUS Al/HERAEUS/Nichetech	
	Assembly	Bond Wire/Clip Bond Material/ Supplier				Clip/PDE		Clip/PDE		Clip/PDE		Clip/SSHP	Clip / PBE		Clip/HITACHI CABLE		Au/HERAEUS&NBKQ		Au/MULTIPLE		Pb92.5Sn5Ag2.5/HERAEUS Al/HERAEUS&Nichetech		AI/HERAEUS/Nichetech	
	Assembly	Bond Type (at Die				Solder		Solder		Solder		Solder	Solder		Solder		Thermo sonic Thermo sonic		ultrasonic		ultrasonic		ultrasonic	
	Assembly Assembly	Bond Type (at LF No. of bond over active are			Ļ	Solder	+	Solder	-	Solder	-	Solder	Solder 1		Solder		Thermo sonic		ultrasonic		ultrasonic		ultrasonic	\vdash
		Glass Transistion Temp			F	130C	1	130C		130C	-	130*C	135C		130C		135°C		135°C		135C	1	135C	-
	Assembly	Terminal Finish (Plating) Materia			i i	Pbfree		Pbfree		Pbfree		Pbfree	100% matte Tin		Pbfree		NiPdAu		Pbfree		Pbfree		100% Matte Tin	
	Assembly	Header plating (Die Land Area				Spot Ag		Spot Ag		Spot Ag		Spot Ag	Bare copper		Spot Ag		NiPdAu		Spot Ag		Bare copper		Bare copper	
	Assembly	Wire Diameter			Į.	Clip PowerDi-5 E type	_	Clip PowerDi-5 F type		Clip	-	Clip	Clip		Clip		1.0mil		2mil SOD-123A		15mil DPAK-3L F		15mil	\vdash
	Assembly Assembly	Leadframe Type				PowerDi-5 F type CDA194HH	+	PowerDi-5 F type CDA194HH	1	PowerDi-5 F typ∈ CDA194HH	+	PowerDi-5 F type CDA194FH	KLF00281 CDA194HH		PowerDi-5 F type CDA194HH		SLP1006P2 C7025HH		SOD-123A Allov 42	1	DPAK-3L F 12SnOFC-H	\vdash	TO263-3L bare KFC	\vdash
	Assembly	Molding Compound Type			F	EME-G700LA-LA		EME-G700LA-LA	1	EME-G700LA-LA		EME-G700LA-LA	EME-G600		EME-G700LA-LA		EME-G770HCD		GR640HV-L1		EME-G630AY		KTMC1050G	
	Assembly	Mold Compound Material Manufacture			ľ	SUMITOMO		SUMITOMO		SUMITOMO		SUMITOMO	SUMITOMO		Sumitomo		SUMITOMO		HENKEL		SUMITOMO		KCC	
	Assembly Assembly	Green Compound (Yes/No				Yes Sn/Yuan Hao		Yes Sn/Yuan Hao		Yes Sn/Yuan Hac		Yes Sn/Yuan Hac	Yes Sn/Yuan Hac		Yes Sn/Yuan Hac		Yes Sn/Yuan Hac		Yes Sn/Yuan Hac		Yes Sn/Yuan Hac		Yes Sn/Yuan Hac	
	Assembly Assembly	Plating Material / Source			Į.	Sn/Yuan Hao Ves	+ +	Sn/Yuan Hao Yes	-	Sn/Yuan Hac Yes	-	Sn/Yuan Hac Yes	Sn/Yuan Hac Yes	_	Sn/Yuan Hac Ves		Sn/Yuan Hac Ves		Sn/Yuan Hac		Sn/Yuan Hac Yes		Sn/Yuan Hac Yes	-
	Assembly	Assembly Site/ Location			-	SAT / China		SAT / China		SAT / China		SAT / China	SAT / China		SAT / China		SAT / China		SAT / China	1	SAT / China	1	SAT / China	1
	Assembly	Test Site/ Location				SAT / China		SAT / China		SAT / China		SAT / China	SAT / China		SAT / China		SAT / China		SAT / China		SAT / China		SAT / China	
	Product	Max Junction Temp				175C		175C		175C		150C DS31371	150C		175C		150°C DS31134		150C		150C DS38241		150C	
	Product Product	DataSheel Oual Plan Number			-	DS39274 22112403	_	DS39274 22112403		DS39274 22112403	_	DS31371 19112604	DS36535 21083104		DS37626 22020903		DS31134 20080601		DS31525 20080601	-	DS38241 20080601	-	DS36348 20080601	
	Flounce	Reliability and Characterization Testing				22112403	_	22112403		22112403	_	19112004	21063104		22020903	_	20080801		20080001	-	20080801	-	20080001	-
		Reliability and Characterization Testing					-				-													
# In AEC- Q101 (D)	Test	Test Conditions	Duration / Limits	# Failed/ Sample Size per Lot	# of Lots	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fai I	QBS Test Completed F	Results lass/Fai QBS Test Completed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail
# In AEC- Q101 (D)	Test MSL1 Pre-	Bake 125C		Size per Lot SMD only,		X = Test Needed	Results Pass/Fail	X = Test Needed	Pass/Fail	X = Test Needed	Results Pass/Fai I	X = Test Needed	PASS X = Test Needec	Pass/Fail	X = Test Needed	Pass/Fail	X = Test Needed	PASS	X = Test Needed	Pass/Fail	X = Test Needed	PASS	X = Test Needec	
# In AEC- Q101 (D)		Bake 125C Soak 85C, 85% RH	24 Hrs 168Hrs	Size per Lot SMD only, for Test	# of Lots 3 Assembly lots	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needed X = Test Needed	PASS	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	r door dii	X = Test Needec X = Test Needec	PASS PASS
# In AEC- Q101 (D)	MSL1 Pre-	Bake 125C Soak 85C, 85% RH IR reflow 280C	24 Hrs 168Hrs 3 cycles	Size per Lot SMD only,		X = Test Needed X = Test Needed X = Test Needed	PASS	X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed	PASS	X = Test Needed X = Test Needed X = Test Needed	PASS	PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec	PASS PASS PASS
4 In AEC-Q101 (D)	MSL1 Pre- conditioning EXTERNAL VISUAL EV)	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071	24 Hrs 168Hrs 3 cycles PER SPEC	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio	3 Assembly lots	X = Test Needed X = Test Needed	1 700	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed		X = Test Needed X = Test Needed	PASS	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needed X = Test Needed	PASS PASS	X = Test Needec X = Test Needec	PASS PASS PASS PASS
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4 HIN AEC-Q101 (D)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots	X = Test Needec	PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS	X = Test Needec	Name	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needec	PASS PASS PASS PASS PASS PASS PASS
4 III AEC-Q101 (D)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV)	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC access data sheet temperature rang MIL-750D, METHOD 4066	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio 0/25 0/50 0/77 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec X = Test Needec X = Test Needec	PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needec X = Test Needec X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needec X = Test Needec X = Test Needec	PASS PASS PASS PASS PASS
4 III AEC-Q101 (D)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERHICATION (PV) FORWARD SURGE HTRB	Bake 125C Soak 85C, 85% RH IR reflow 280C MIL-STD-750 METHOD 2071 Testal parameters per Data Sheet incuding AC & DC across data sheet immerature rang MIL-750D, METHOD 4666 Ta=150°C or Max Tj. "Max DC Reverse Voltage, PER MI STD-750-1	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC. DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio 0/25 0/50 0/77 0/77 0/77 0/77 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS/Fail PASS PASS PASS PASS PASS PASS PASS PA	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS/Fail PASS PASS PASS PASS PASS PASS PASS PA	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
4	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang MIL-750D, METHOD 306T Ta=150°C or Max, 1, Max DC Reverse Voltage, PER MI	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 1500 Hrs 1000 Hrs 168 Cycles 500 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec X = Test Needec X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
AEC-Q101 (D) 2 3 4 5 5 7	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB	Bake 125C Soak 85C, 85% RH IR reflow 280C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet incuding AC & DC across data sheet inemperature rang MIL-750D, METHOD 4666 Ta=150°C or Max Tj, "Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 169 Cycles 500 Cycles 1000 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualificatio 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS/Fail PASS PASS PASS PASS PASS PASS PASS PA	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS/Fail PASS PASS PASS PASS PASS PASS PASS PA	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
AEC-Q101 (D) 2 3 4 5	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERHICATION (PV) FORWARD SURGE HTRB	Bake 125C Soak 85C, 85% RH IR reflow 280C MIL-STD-750 METHOD 2071 Testal parameters per Data Sheet incuding AC & DC across data sheet immerature rang MIL-750D, METHOD 4666 Ta=150°C or Max Tj. "Max DC Reverse Voltage, PER MI STD-750-1	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 169 Cycles 500 Cycles 1000 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualification 0/25 0/50 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec X = Test Needec X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
AEC-Q101 (D) 2 3 4 5 7	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlouding AC & DC across data sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj, "Max DC Reverse Voltage, PER Mil STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=-55C to 175C Per Datasheet Max Tj, PER JESD22A-	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 200 Cycles 400 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualification 0/25 0/50 0/77	3 Assembly lots on parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 8 (alt)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB	Bake 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METH-IDD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang MIL-750D, METH-IDD 4056 Ta=150°C or Max Tj, *Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 150C or Max Tj, *PER JESD22A-104 Ta=-55C to 175C Per Datasheet Max Tj, *PER JESD22A-104 Ta=121°C 15PSIG 100%RH; *PER JESD22- Ta=130C, 85%RH, 33 Spia, 80% Bias or up to a voltage	24 Hrs 168Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 168 Cycles 1000 Cycles 1000 Cycles 200 Cycles	Size per Lot SMD only, for Test #7, 8, 9 & All qualification 0/25 0/50 0/77	3 Assembly lots ion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS/FAII PASS PASS PASS PASS PASS PASS PASS PAS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 7 8 (alt)	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC	Bake 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet iniculing AC & DC accross data sheet temperature rang MIL-750D, METHOD 4087 Ta=150°C or Max TJ, Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A 104 Ta=121°C 15PSIG 100%RH; PER JESD22- A102 Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 427). PER JESD22-	24 Hrs 168/hrs 3 cycles PER SPEC PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 500 Cycles 200 Cycles 200 Cycles 400 Cycles 96 Hrs	Size per Lot SMD only, for Test #7. 8, 9 & Air qualification 10/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Tost Needed	PASS/PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
# In- Q101 (D) 2 3 4 5 7 7 8 (alt)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST	Bake 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METH-IDD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang MIL-750D, METH-IDD 4066 Ta=150°C or Max Tj, *Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=155°C to 175°C Per Datasheet Max Tj, *PER JESD22A-104 Ta=121°C 157°SIG 100%RH; PER JESD22- Ta=130C, 855%RH, 33 3 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V). PER JESD22- A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias o	24 Hrs 168Hre 168Hre 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 168 Cycles 1000 Cycles 1000 Cycles 200 Cycles 400 Cycles 96 Hrs 96 Hrs	Size por Lot SMD only, for Test #7, 8, 9 & All qualification of the control of t	3 Assembly lots son parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 5 Assembly lots 6 Assembly lots 7 Wafer lots 8 Wafer lots 9	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS/PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 7 8 (alt)	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC	Bake 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet iniculing AC & DC accross data sheet temperature rang MIL-750D, METHOD 4087 Ta=150°C or Max TJ, Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A 104 Ta=121°C 15PSIG 100%RH; PER JESD22- A102 Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 427). PER JESD22-	24 Hrs 168/hrs 3 cycles PER SPEC PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 500 Cycles 200 Cycles 200 Cycles 400 Cycles 96 Hrs	Size per Lot SMD only, for Test #7. 8, 9 & Air qualification 10/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS/PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS/Fall PASS PASS PASS PASS PASS PASS PASS P	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Tost Needed	PASS/PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 7 8 (alt)	MSL1 Pre- conditioning XXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB	Baka 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METH-IOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet temperature rang MIL-750D, METHOD 4087 Ta=150°C or Max TJ, METHOD 4087 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=150°C of Max TJ, PER JESD22A-104 Ta=150°C of Max TJ, PER JESD22A-104 Ta=150°C 55% RH, S3 3 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V). PER JESD22- A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias o up to a maximum of 100V or limit of chamber. JESD22A-101 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias o up to a maximum of 100V or limit of chamber. JESD22A-101	24 Hrs 168/Hrs 108/Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC. DC.) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 96 Hrs 96 Hrs 168 Hrs 500 Hrs 168 Cycles 1000 Cycles	Size per Lot SMD only, for Test #7, 8, 9 8 All qualification 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 7 8 (alt) 9 alt	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST	Bake 125C Soak 85C, 85% RH IR reflow 280C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet incuding AC & DC across data sheet incomerature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj. *Max DC Reverse Voltage, PER MI STD-750-1 Ta=55°C to 150°C or Max Tj. PER JESD22A-104 Ta=-55°C to 175°C Per Datasheet Max Tj. PER JESD22A-104 104 Ta=121°C 15PSIG 100%RH: PER JESD22A-104 105 Shight 39 side, 80% Bias or up to a voltag above which acring in the chamber will likely occur (typically 42°V.) *PER JESD22-A102 Ta=58°C, 85% RH, with 80% Maximum Reverse Bias or up to a maximum of 100°V or limit of chamber. JESD22A-104 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias or up to a maximum of 100°V or limit of chamber. JESD22A-105 to amazimum of 100°V or limit of chamber. JESD22A-1150	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 500 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 500 Hrs 168 Hrs 500 Hrs	Size per Lot SMD only, for Tests #7, 8, 9 & All qualification (125	3 Assembly lots son parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 5 Assembly lots 6 Assembly lots 7 Wafer lots 8 Wafer lots 9	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet increase and management of the sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj, "Max DC Reverses Voltage, PER MI STD-750-1 Ta=55°C to 150°C or Max Tj, PER JESD22A-104 Ta=25°C to 175°C Per Datasheet Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22-A102 Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltage above which arring in the chamber will likely occur (typically 42V). PER JESD22-A110 Ta=85°C, 85% RH, with 90% Maximum Reverse Bias o up to a maximum of 1000 or limit of chamber, JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS)	24 Hrs 168/Hrs 168/Hrs 3 cycles PER SPEC Operating Range, Per Data Sheeft Mc. DCI Sheeft Mc. DCI PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 96 Hrs 168 Hrs 500 Hrs 168 Cycles 200 Cycles	Size per Lot SMD only, for Test #7, 8, 9 8 All qualificatio 0/25 0/77 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
2 3 4 5 7 7 8 (alt) 9 9 alt 10 111	MSL1 Pre- conditioning XXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB	Bake 125C Sook 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inkouting AC & DC across data sheet inemperature rang MIL-750D, METHOD 4056 Ta=150°C or Max Tj, *Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=-55C to 175C Per Datasheet Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22-1310C, 85%RH, 33, 3 plas or up to a voltag above which arcing in the chamber will likely occur (typically 42'V.) PER JESD22- Ta=55°C, 65 %RH, with 60% Maximum Reverse Bias o up to a maximum of 100V or limit of chamber. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001)	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Cycles 200 Cycles 1000 Cycles 15000 Cycles 15000 Cycles 15000 Cycles	Size per Lot SMD only, for Test #7.8, 9.8 to 10.75 to 10.75 to 10.75 to 10.77 to 10.	3 Assembly lots son parts submitted for testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 4 wafer lots 1	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt	MSL1 Pre- conditioning XTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet increase and management of the sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj, "Max DC Reverses Voltage, PER MI STD-750-1 Ta=55°C to 150°C or Max Tj, PER JESD22A-104 Ta=25°C to 175°C Per Datasheet Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22-A102 Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltage above which arring in the chamber will likely occur (typically 42V). PER JESD22-A110 Ta=85°C, 85% RH, with 90% Maximum Reverse Bias o up to a maximum of 1000 or limit of chamber, JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS)	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Cycles 200 Cycles 1000 Cycles 15000 Cycles 15000 Cycles 15000 Cycles	Size per Lot SMD only, for Test #7, 8, 9 8 All qualificatio 0/25 0/77 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10	MSL1 Pre- conditioning XTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD PDPA Package PPAicage PACkage PPAicage Package PPAicage Package PPAicage Package PpAicage	Bake 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC accross data sheet temperature rang MIL-750D, METHOD 4087 Ta=150°C or Max Tj. Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max Tj. PER JESD22A-104 Ta=55C to 175C Per Datasheet Max Tj. PER JESD22A-104 Ta=25°C 175C Per Datasheet Max Tj. PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22- A100 Ta=55C to 175C Per Datasheet Max Tj. PER JESD22A-104 Ta=55C to 175C Per Datasheet Max Tj. PER JESD22- A101 Ta=55C to 85% RH, 33 3 psis, 80% Bias or up to a voltage above which arcing in the chamber will likely occur (typically 42V). PER JESD22- A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias o up to a maximum of 100V or limit of chamber. JESD22A- 101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-001)	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Cycles 200 Cycles 1000 Cycles 15000 Cycles 15000 Cycles 15000 Cycles	Size per Lot SMD only, for Test #7, 8, 9 8 All qualificatio 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) RESISTANCE TO	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max Tj, PER JESD22A-104 Ta=55C to 150C or Max Tj, PER JESD22A-104 Ta=151°C or Max Tj, PER JESD22A-104 Ta=151°C 15PSIG 100°KRH; PER JESD22A-104 Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V); PER JESD22A-110 Ta=85°C, 85% RH, with 80°K Maximum Reverse Bias or up to a maximum of 100V or limit of chamber, JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-005) AEC Q101-005 SEC. 4	24 Hrs 168Hrs 168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheel (AC, DC) PER DATA SHEET 188 Hrs 500 Hrs 168 Cycles 1000 Cycles 1000 Cycles 400 Cycles 400 Cycles 96 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 169 Hrs 1700 Hrs 189 Hrs 189 Hrs 189 Hrs 189 Hrs 190 Hrs 190 Hrs 190 Cycles 1000 Cycles	Size per Lot SMD only, for Test #7.8, 9 & No. 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 4 wafer lots 1 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20	MSL1 Pre- conditioning XTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) RESISTANCE TO RES	Balte 125C Scalk 85C, 85% RH RY reflow 200C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inkouling AC & DC across data sheet inequering AC & DC across data sheet temperature rang MIL-750D, METHOD 4056 Ta=150°C or Max TJ, "Max DC Reverse Voltage, PER MII STD-750-1 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=-55C to 175C Per Datasheet Max TJ, PER JESD22A 104 Ta=121°C 15FSIG 100%RH; PER JESD22A 2110 Ta=150°C, 85%RH, 33, 99ia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V). PER JESD22A 2110 Ta=85°C, 85% RH, will 90% Maximum Reverse Bias or up to a maximum of 100V or limit of chamber. JESD22A 101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-0101-001) CDM (AEC-0101-001) LEDM (AEC-0101-005) AEC 0101-004 BEC-4 JESD22-8-110 JESD22-8-110	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 200 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 169 Cycles 15000 Cycl	Size per Lot SMD only, for Test 187, 8, 9, 8 All qualification 0/25 0/77 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) RESISTANCE TO	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet incuding AC & DC accross data sheet incuding AC & DC accross data sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max Tj, *Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=-55C to 175C Per Datasheet Max Tj, PER JESD22A-104 104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=130C, 85%RH, 33 psile, 80% Bias or up to a voltag above which arding in the chamber will likely occur (typically 42V); PER JESD22- A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias or up to a maximum of 100V or limit of chamber, JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-0101-001) CDM (AEC-0101-001) JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) J-STD-002; JESD22B102 (245C+05S)	24 Hrs 168/hrs 3 cycles PER SPEC PER SPEC Operating Range, Per Data Sheel (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 168 Cycles 1000 Cycles 200 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 96 Hrs 96 Hrs 168 Hrs 500 Hrs 168 Cycles 97 Hrs 168 Hrs 169 Cycles 1760 C	Size per Lot SMD only, for Test 187, 8, 9 8 All qualification of 197, 197, 197, 197, 197, 197, 197, 197,	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 4 wafer lots 1 wafer lot 1 wafer lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21 22	MSL1 Pre- conditioning EXTERNAL VISUAL EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) RESISTANCE TO SOLDER HEAT (IRSH) Solderability Solderabili	Bake 125C Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlouding AC & DC accross data sheet temperature rang MIL-750D, METHOD 406T Ta=150°C or Max TJ, MEAN DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22- A10 Ta=150°C, 85%RH, 33.3 psis, 80% Bias or up to a voltage above which acrigin the chamber will likely occur (typically 42V). PER JESD22- A110 Ta=65C, 85% RH, with 80% Maximum Reverse Bias or up to a walking above which acrigin the chamber will likely occur (typically 42V). PER JESD22- A110 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-001) CDM (AEC-Q101-005) AEC Q101-004 SEC. 4 JESD22-B100 JESD22 A-111 (MMD), B-106 (PTH) (260C @10S) J-STD-002; JESD22B102 (245C+09S) JESD2 4-3, 24-4, 24-6 AS APPROPRIATE	24 Hrs 168/hrs 3 cycles PER SPEC PER SP	Size per Lot SMD only, 107 per	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot 1 Assembly lot 1 Assembly lot	X = Test Needec X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needec	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed X = Test N	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21 22 23	MSL1 Pre- conditioning XTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) RESISTANCE (TD) SOlderability THERMAL RESISTANCE TO SURGE SURGE RESISTANCE TO SURGER SU	Balte 125C Scalk 85C, 85% RH R reflow 280C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inkouding AC & DC across data sheet inequering AC & DC across data sheet temperature rang MIL-750D, METHOD 4066 Ta=150°C or Max TJ, "Max DC Reverse Voltage, PER MII STD-750-1 Ta=-55C to 15°C Or Max TJ, PER JESD22A-104 Ta=-55C to 17°SC Per Datasheet Max TJ, PER JESD22A 104 Ta=121°C 15°SIG 100%RH; PER JESD22A Ta=130C, 85°NRH, 33 psila, 50% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V). PER JESD22A 101 Ta=85°C, 85% RH, will 90% Maximum Reverse Bias or up to a maximum of 100V or limit of chamber. JESD22A 101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-0101-001) CDM (AEC-0101-005) AEC 0101-004 BEC-4 JESD22-8-110 JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) J-STD-002, JESD22B102 (245C +05'S) J-STD-002, JESD22B102 (245C +05'S) JESD 24-3, 24-4, 24-4 AS APPPOPRIATE MIL-STD-750 METHOD 2037 (JESD22-B1168)	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 1560 Hrs 168 Hrs 169 Cycles 15000 Cycles	Size per Lot SMD only, for Test 187, 8, 9, 8 All qualification, 197, 197, 197, 197, 197, 197, 197, 197	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21 22 23 24	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST HSTRB IOL ESD DPA Package Physical Dimensions (PD) THERMAL RESISTANCE TO SOLDER HEAT (RSH) THERMAL RESISTANCE TOR WIRE BOOND SHEADIN BOOND SHEADIN WIRE BOOND SHEADIN BOOND S	Bake 125C Soak 80C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC accross data sheet temperature rang MIL-750D, METHOD 406T Ta=150°C or Max TJ, Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=150°C, 85%RH, 33. 3 psis, 80% Bias or up to a voltage above which acrigin the chamber will likely occur (typically 42V). PER JESD22- A110 Ta=65C, 85% RH, with 80% Maximum Reverse Bias or up to a woltage above which acrigin the chamber will likely occur (typically 42V). PER JESD22- A110 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-001) JESD22 A-111 (SMD), B-106 (PTH) (280C @10S) J-STD-002: JESD22-B100 JESD22-A-124-(24-6 AS APPROPRIATE MIL-STD-750 METHOD 2037 (JESD22-B168)	24 Hrs 168/hrs 3 cycles PER SPEC Coperating Range, Per Data Sheel (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 168 Cycles 1000 Cycles 200 Cycles 250 Cycles 25	Size per Lot SMD only, for Test 187, 8, 9, 8 All qualification 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 4 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 kasembly lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needed	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21 22 23	MSL1 Pre- conditioning XTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST H3TRB IOL ESD DPA Package Physical Dimensions (PD) Soldera HAT (RSH) Solderability THERMAL RESISTANCE TO SOLDER HEAT (RSH) Wire Bond Strength BOND SHEAR BOND SHEAR BOND SHEAR	Baka 125C Soak 85C, 85% RH IR reflow 250C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC accross data sheet temperature rang MIL-150D, METHOD 4067 Ta=150°C or Max TJ, Max DC Reverse Voltage, PER MI STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=55C to 175C Per Datasheet Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22- A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias o up to a woltage above which arcing in the chamber will likely occur (typically 42V). PER JESD22- A110 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-0101-001) CDM (AEC-0101-005) AEC 0101-004 SEC. 4 JESD22-B100 JESD22 A-111 (SMD), B-106 (PTH) (280C @10S) J-STD-002; JESD22-B106 (245C +05S) JESD 24-3, 24-4, 24-6 AS APPROPRIATE MIL-STD-750 METHOD 2037 (JESD22-B1168)	24 Hrs 168Hrs 3 cycles PER SPEC Operating Range Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 1000 Hrs 168 Cycles 1000 Cycles 200 Cycles 200 Cycles 400 Cycles 400 Cycles 400 Cycles 1560 Hrs 168 Hrs 169 Cycles 15000 Cycles	Size per Lot SMD only, for Test 187, 8, 9, 8 All qualification, 197, 197, 197, 197, 197, 197, 197, 197	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS
5 7 7 8 (alt) 9 9 alt 10 11 12 13 20 21 22 23 24	MSL1 Pre- conditioning EXTERNAL VISUAL EVI PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC TC PCT/AC HAST HSTRB IOL ESD DPA Package Physical Dimensions (PD) THERMAL RESISTANCE TO SOLDER HEAT (RSH) THERMAL RESISTANCE TOR WIRE BOOND SHEADIN BOOND SHEADIN WIRE BOOND SHEADIN BOOND S	Balte 125C Soak 85C, 85% RH R reflow 280C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet incuding AC & DC accross data sheet inemperature rang MIL-750D. METHOD 4056 Ta=150°C or Max TJ, "Max DC Reverse Voltage, PER MI STD-750-1 Ta=-55C to 15°C Or Max TJ, PER JESD22A-104 Ta=-55C to 15°C Per Datasheet Max TJ, PER JESD22A-104 Ta=-55C to 15°C Per Datasheet Max TJ, PER JESD22A-104 Ta=121°C 15°PSIG 100%RH; PER JESD22A-104 Ta=130C, 85%RH, 33 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V); PER JESD22- Ta=130C, 85%RH, 33 psia, 80% Bias or up to a voltag above which arcing in the chamber will likely occur (typically 42V); PER JESD22- M110 Ta=85°C, 85% RH, will 80% Maximum Reverse Bias or up to a maximum of 100V or innit of chamber. JESD22A-101 MIL-STD-750 METHOD 2037 (JESD22B 102 (245C 405S)) JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) JESD22 A-115 (SMD), B-106 (PTH) (260C @10S) JESD22 A-124, 24-4, 24-6 AS APPROPRIATE MIL-STD-750 METHOD 2037 (JESD22B 116B) AEC-0101-003 MIL-STD-750 METHOD 2037 (JESD22B 116B) MIL-STD-750 (2017) (Not required for soft solder die	24 Hrs 168/hrs 3 cycles PER SPEC Coperating Range, Per Data Sheel (AC, DC) PER DATA SHEET 168 Hrs 1000 Hrs 168 Cycles 1000 Cycles 200 Cycles 250 Cycles 25	Size per Lot SMD only, for Test 187, 8, 9, 8 All qualification 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	3 Assembly lots on parts submitted fo testing 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 4 wafer lots 1 wafer lots 1 wafer lots 1 wafer lot 1 wafer lot 1 kasembly lot 1 Assembly lot	X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needec X = Test Needed	PASS	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needed	PASS PASS PASS PASS PASS PASS PASS PASS	X = Test Needec X = Test Needec X = Test Needec X = Test Needed X = Test Needed X = Test Needed X = Test Needec	PASS PASS PASS PASS PASS PASS PASS PASS



Description: SBR 8inch porting 20~120V qualification

	Category					Qual Device 1		Qual Device 2		Oual Device 3		Qual Device 4		Qual Device 5		Qual Device 6		Qual Device 7		QBS Source Device 1	
	Product	Part Number				SBR02E20LP-7		SBR60A20CT		SBR02U100LP-7		SBR40U120CT		SBR0560S1Q-7		SBR20M45D1-13		SBR30A45CTB-13-G		SBR10E45P5-13	
-	Assembly	Package Type				DFN1006-2	1	TO220-3L		DFN1006-2	1	T0220-3L	 	SOD-123		TO252-3L		TO-263AB		PowerDi-5	
	Assembly	Package Type Package Size				1.0*0.6*0.5mm	1	28.6*10.11*4.57mm		1.0*0.6*0.5mm	1	28.6*10.11*4.57mm	 	1.55*3.7*1.06mm		9.91*6.58*2.29mm		15.24*10.16*4.44		6.5*3.97*1.10mm	
-	Wafer	Die Name(s)				SS014A020AEB2-8-BGN	1	SS146A020AEC2-8-HGN		SS014A100AGB7-8-BGN	1	SS143A120AJD2-8-4I	 	SS030A060AEA2-8-HGN		SS124A045AED2-8-HGN		SS112A045AEA2-8-HGN		SS112A045PEA2-8-4C	
	Wafer	Die Size (W/L/Thickness) - After Saw				0.40*0.35*0.14mm	1	3.504*3.922*0.25mm		0.40*0.35*0.14mm	1	3.494*3.912*0.25mm	 	0.78*0.78*0.25mm		3.97*2.56*0.25mm		2.84*2.84*0.25mm		2.84mm * 2.84 mm	
	Wafer	Die Process / Technology				SBR	1	SBR		SBR		SBR		SBR		SBR		SBR		Standard SBR	
	Wafer	Wafer FAB/ Location				SFAB	1	SFAB		SFAB	1	SFAB		SFAB		SFAB		SFAB		SFAB	
	Wafer	Wafer Diameter				8inch	1	8inch		8inch		8inch		8inch		8inch		8inch		8 inch	
	Wafer	Front Metal Type				Al-Si-Cu	+	Al-Si-Cu		Al-Si-Cu		Al-Si-Cu		Al-Si-Cu	1	AlSiCu		AlSiCu		NiAu	
	Wafer	Front Metal Layer Number/ Thickness				Al-Si-Cu/30kA	1	Al-Si-Cu/30kA		Al-Si-Cu/40kA	1	Al-Si-Cu/30kA		Al-Si-Cu/30kA		Al-Si-Cu/30kA		Al-Si-Cu/30kA		1.5 / 0.05 um	
	Wafer	Number of Poly Layers				1 poly	1	1 poly		1 poly		1 poly		1 poly		1 poly		1 poly		1.57 0.05 um	
	Wafer	Back Metal Type (All Layers)				Ti-Ni-Ag	1	Ti-Ni-Ag		Ti-Ni-Ag		Ti-Ni-Ag		Ti-Ni-Ag		Ti/Ni/Ag		Ti/Ni/Ag		TiNiAg	
	Wafer	Back Metal Thickness (All Layers)				1kA/ 3kA/ 10kA		1kA/ 3kA/ 10kA		1kA/ 2kA/ 8kA		1kA/ 3kA/ 10kA		1kA/ 3kA/ 10kA		1kA/ 3kA/ 10kA		1kA/ 3kA/ 10kA		1k/ 3k/ 10k A	
	Wafer	Die Conforming Coating (Passivation)				None		None		None		None		None		None		None		None	
	Wafer	Die passivation thickness range				None		None		None		None		None		None		None		None	
	Wafer	No of masks Steps				4		4		4		4		4		4		4		4	
	Assembly	Die quantity per package (e.g. single or dual dies)				Single		Dual dies		Single		Dual dies		Single		Single		Dual dies		Single	
	Assembly	Die Attach Method (DB Epoxy/Solder Type)				Epoxy	1	Soft solder		Epoxy	1	SOFT-SOLDER		Epoxy		SOFT-SOLDER		SOFT-SOLDER		Solder	
	Assembly	Die Attach Material/ Supplier				QMI519/HENKEL		Pb92.5Sn5Ag2.5/HERAEUS		QMI519/HENKEL		Pb92.5Sn5Ag2.5/HERAEUS		84-1LMISR4		Pb92.5Sn5Ag2.5/HERAEUS		Pb92.5Sn5Ag2.5/HERAEUS		NC-SMQ51SC/Indium	
	Assembly	Bond Wire/Clip Bond Material/ Supplier				Au/HERAEUS&NBKQ	1	AI/HERAEUS&Nichetech		Au/HERAEUS&NBKQ		Al/HERAEUS&Nichetech		Au/MULTIPLE		Al/HERAEUS&Nichetech		Al/HERAEUS/Nichetech		Clip/SSHP	
	Assembly	Bond Type (at Die)				Thermo sonic	1	ultrasonic		Thermo sonic	1	ultrasonic		ultrasonic		ultrasonic		ultrasonic		Solder	
	Assembly	Bond Type (at LF)				Thermo sonic	1	ultrasonic		Thermo sonic	1	ultrasonic		ultrasonic		ultrasonic		ultrasonic		Solder	
	Assembly	No. of bond over active area				2		4		2		6		2		2		4		1	
	Assembly	Glass Transistion Temp				135°C		135°C		135°C		135°C		135°C		135C		135C		130*C	
	Assembly	Terminal Finish (Plating) Material				NiPdAu		100% Matte Tin		NiPdAu		Pbfree		Pbfree		Pbfree		100% Matte Tin		Pbfree	
	Assembly	Header plating (Die Land Area)				Ag Plating		Bare copper		NiPdAu		Bare copper		Spot Ag		Bare copper		Bare copper		Spot Ag	
	Assembly	Wire Diameter				1.0mil		15mil		1.0mil		15mil		2mil		15mil		15mil		KLP00014	
	Assembly	Leadframe Type				SLP1006P2-U		TO220-3L C	1	SLP1006P2		TO220-3L C		SOD-123A		DPAK-3L F		TO263-3L bare		PowerDi-5 F type	
	Assembly	Leadframe Material				ALLOY42		KFC		C7025HH		KFC		Alloy 42		12SnOFC-H		KFC		CDA194FH	
	Assembly	Lead Frame Manufacturer				SHEC/ASM		XMYM/ NBKQ		ASM&PBE&MHT		XMYM/ NBKQ		XMYH/JYKQ/MHT		HITACHI		XMYM/ NBKQ		NBKQ	
	Assembly	Molding Compound Type				EME-G770HCD		KTMC1050G		EME-G770HCD		EME-G630AY		GR640HV-L1		EME-G630AY		KTMC1050G		EME-G700LA-LA	
	Assembly	Mold Compound Material Manufacturer				SUMITOMO		KCC		SUMITOMO		SUMITOMO		HENKEL		SUMITOMO		KCC		Sumitomo	
	Assembly	Green Compound (Yes/No)				Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
	Assembly	Lead-Free (Yes/No)				Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
	Assembly	Assembly Site/ Location				DSH		DSH		DSH		DSH		DSH		SAT		SAT		SAT / Shanghai	
	Assembly	Test Site/ Location				DSH		DSH		DSH		DSH		DSH		SAT		SAT		SAT / Shanghai	
	Product	Max Junction Temp				150C		150C		150°C		150C		150C		150C		150C		150C	
	Product	DataSheet				DS31062		DS31421		DS31134		DS31584		DS31525		DS38241		DS36348		37867	
	Product	Qual Plan Number				20080601		20080601		20080601		20080601		20080601		20080601		20080601		19112604	
		Reliability and Characterization Testing		_																	
		itenability and enaracterization resting																			
# in AEC- Q101	lest	Test Conditions	Duration / Limits	# Failed/ Sample	# of Lots	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	QBS Test Completed	Results Pass/Fail
(D)				Size per Lot																	
		Rake 125C	24 Hrs	Size per Lot SMD only.		X = Test Needed	Pass			X = Test Needed	Pass			X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X	Pass
		Bake 125C	24 Hrs	SMD only,	3 Assembly lots	X = Test Needed	Pass			X = Test Needed	Pass			X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X	Pass
	MSL1 Pre-conditioning	Soak 85C, 85% RH	168Hrs	SMD only, for Test #7,	3 Assembly lots	X = Test Needed	Pass			X = Test Needed	Pass			X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X X X	Pass
	MSL1 Pre-conditioning	Soak 85C, 85% RH IR reflow 260C	168Hrs 3 cycles	SMD only, for Test #7, 8, 9 & 10	3 Assembly lots tion parts submitted for	X = Test Needed X = Test Needed	Pass Pass		_	X = Test Needed X = Test Needed	Pass Pass			X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X	Pass Pass
		Soak 85C, 85% RH	168Hrs	SMD only, for Test #7, 8, 9 & 10		X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass	X = Test Needed	Pass		Pass
	MSL1 Pre-conditioning	Soak 85C, 85% RH IR reflow 260C	168Hrs 3 cycles PER SPEC	SMD only, for Test #7, 8, 9 & 10 All qualifica	tion parts submitted for testing	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass			X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass			X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X	Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV)	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071	168Hrs 3 cycles PER SPEC	SMD only, for Test #7, 8, 9 & 10 All qualifica	tion parts submitted for	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X	Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee	SMD only, for Test #7, 8, 9 & 10 All qualifica	tion parts submitted for testing	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass			X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass			X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass	X	Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV)	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC accross data sheet temperature range	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC)	SMD only, for Test #7, 8, 9 & 10 All qualifica	tion parts submitted for testing 3 wafer lots	X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass	X = Test Needed	Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass	X = Test Needed	Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass	x x x	Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV)	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inicuding AC & DC accross data sheet temperature range	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25 0/50 0/77 0/77	tion parts submitted for testing 3 wafer lots	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass	x x x	Pass Pass Pass Pass Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25 0/50 0/77 0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica t 0/25 0/50 0/77 0/77 0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25 0/50 0/77 0/77 0/77 0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica t 0/25 0/50 0/77 0/77 0/77	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
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(D) 2 3 4 5 7 8 (alt	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC PCT/AC HHT	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-A102 Ta=85°C, 85% RH,	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs	SMD only, for Test #7, 8, 9 & 10, 10 All qualificant	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
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(D) 2 3 4 5 7 8 (alt	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC PCT/AC HHT HAST	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22-A102 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica vit 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 5 7 8 (alt 8 (alt) 9	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC PCT/AC HHT HAST	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85%RH, with 80% Maximum Reverse Bias.	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10) All qualifica et	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 5 7 8 (altt 9 9 altt	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 169 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica over the control of the control o	tion parts submitted for testing. 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 5 7 8 (alt 8 (alt	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC PCT/AC HHT HAST	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85%RH, with 80% Maximum Reverse Bias.	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs	SMD only, for Test #7, 8, 9 & 10, 10 All qualifica et 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 5 7 8 (altt 9 9 altt	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 1000 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
2 3 4 5 7 8 (altt 9 9 altt 10 10 10 10 10 10 10 10 10 10 10 10 10	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1750 Cycles 18 Hrs 19 Hrs 19 Hrs 10 Cycles 1500 Cycles	SMD only, for Test #7, 8, 9 & 10 All qualifica et 0/25 0/50 0/77 0/77 0/77 0/77 0/77 0/77 0/7	tion parts submitted for testing. 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lots 1 wafer lots	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
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(D) 2 3 4 4 5 5 7 8 (altt 8 (altt 9 9 altt 10 11 12 12	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC PCT/AC HHT HAST H3TRB IOL ESD DPA Parkage Physical	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1700 Hrs 18 Hrs 18 Hrs 18 Hrs 18 Hrs 18 Hrs 18 Hrs 19 Hrs 18 Hrs 1000 Hrs 19 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 1000 Cycles 15000 Cycles PER DATA SHEET PER DATA SHEET	SMD only, for Test #7, 8, 9 & 10 All qualifica at 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 7 8 (altt 8 (altt 9 9 altt 10 11	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB IOL ESD DPA Package Physical	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=55°C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A100 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 168 Hrs	SMD only, for Test #7, 8, 9 & 10 All qualifica at 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 5 7 8 (altt 9 9 altt 10 11 12 12	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB IOL ESD DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-002) AEC Q101-004 SEC. 4	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee' (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Cycles 15000 Cycles PER DATA SHEET PER DATA SHEET	SMD only, for Test #7, 8, 9 & 10 All qualifica at 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 xafer lot 1 xafer lot 1 xafer lot 1 xafer lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 5 7 8 (altt 8 (altt 9 9 altt 10 11 12 13 13	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC HHT HAST H3TRB IOL ESD DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH)	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet including AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A102 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-002) AEC Q101-004 SEC. 4 JESD22-B100	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 5500 Hrs 169 Hrs 168 Hrs 5500 Hrs 17560 Cycles 15000 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET	SMD only, for Test #7, 8, 9 & 10, 10 All qualifica et	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 5 7 8 (altt 8 (altt 9 9 altt 10 11 12 13 20 1 1 1 1 2 1 1 3 2 1 1 1 1 1 2 1 1 3 1 2 1 1 1 1	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB IOL ESD DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A102 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-002) AEC Q101-004 SEC. 4 JESD22-B100 JESD22 A-111 (SMD), B-106 (PTH) (260C @10S)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs 168 Hrs 500 Hrs 169 Hrs 168 Hrs 500 Hrs 169 Hrs 168 Hrs 500 Hrs 17560 Cycles 15000 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET PER DATA SHEET	SMD only, for Test #7, 8, 9 & 10, 10 All qualificant	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 Assembly lot 1 Assembly lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 5 7 8 (altt 9 9 altt 10 11 12 13 20 21 22 23	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC DPCT/AC HHT HAST HAST HAST DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A100 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-004) JESD22 B100 JESD22 B100 JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) J-STD-002; JESD22B102 (245C +0/5S)	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 1000 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Cycles 1500 Cycles 1500 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET PER DATA SHEET PER SPEC 5 Seconds	SMD only, for Test #7, 8, 9 & 10, 10 All qualificant value of the control of the	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 system lot 1 system lot 1 Assembly lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass
(D) 2 3 4 4 5 5 7 8 (altt 9 9 altt 10 11 12 13 20 21 22	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC DPCT/AC HHT HAST HAST HAST DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-102 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-005) MM (AEC-Q101-005) JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) J-STD-002; JESD22B102 (245C +0/5S) JESD 24-3, 24-4, 24-6 AS APPROPRIATE	168Hrs 3 cycles PER SPEC Operating Range, Per Data Sheet (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 1000 Hrs 1000 Hrs PER DATA SHEET PER DATA SHEET PER DATA SHEET PER SPEC 5 Seconds PER SPEC	SMD only, for Test #7, 8, 9 & 10, 10 All qualificant	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 sasembly lot 1 Assembly lot	X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 7 8 (alttle 9 9 alttle 10 11 12 13 3 20 21 22 23 23 3 4 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB IOL ESD DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength BOND SHEAR	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max Tj, Vd=100%, PER MIL-STD-750-1 Ta=55C to 150C or Max Tj, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-101 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22A-101 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias.	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs P6 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs P6 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs 2520 Cycles 7560 Cycles PER DATA SHEET PER DATA SHEET PER DATA SHEET PER DATA SHEET PER SPEC 5 Seconds PER SPEC Cycls1.66	SMD only, for Test #7, 8, 9 & 10 All qualifica at 0/25	tion parts submitted for testing 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 sasembly lot 1 Assembly lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass
(D) 2 3 4 4 5 7 7 8 (alt1 8 (alt1 12 13 13 20 21 22 23 24 4 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	MSL1 Pre-conditioning EXTERNAL VISUAL (EV) PARAMETRIC VERIFICATION (PV) FORWARD SURGE HTRB TC) PCT/AC) HHT HAST H3TRB IOL ESD DPA Package Physical Dimemsions (PD) RESISTANCE TO SOLDER HEAT (RSH) Solderability THERMAL RESISTANCE (TR) Wire Bond Strength BOND SHEAR	Soak 85C, 85% RH IR reflow 260C MIL-STD-750 METHOD 2071 Test all parameters per Data Sheet inlcuding AC & DC accross data sheet temperature range MIL-750D, METHOD 4066 Ta=150°C or Max TJ, Vd=100%, PER MIL-STD-750-1 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=-55C to 150C or Max TJ, PER JESD22A-104 Ta=121°C 15PSIG 100%RH; PER JESD22A-104 Ta=85°C, 85% RH, Ta=130C, 85%RH 33.3 psia 80% Bias; PER JESD22-A110 Ta=85°C, 85% RH, with 80% Maximum Reverse Bias. JESD22A-101 MIL-STD-750 Method 1037 (Not required for TVS) HBM (AEC-Q101-001) CDM (AEC-Q101-005) MM (AEC-Q101-002) AEC Q101-004 SEC. 4 JESD22-B100 JESD22 A-111 (SMD), B-106 (PTH) (260C @10S) J-STD-002; JESD22B102 (245C +0/5S) JESD 24-3, 24-4, 24-6 AS APPROPRIATE MIL-STD-750 METHOD 2037 (JESD22-B116B) AEC-Q101-003	168Hrs 3 cycles PER SPEC Operating Range, Per Data Shee (AC, DC) PER DATA SHEET 168 Hrs 500 Hrs 1000 Hrs 168 Cycles 500 Cycles 1000 Cycles 1000 Cycles 96 Hrs 168 Hrs 500 Hrs 168 Hrs 500 Hrs 1000 Hrs 168 Hrs 500 Hrs 1000 Hrs PER DATA SHEET PER SPEC 5 Seconds PER SPEC Cyb≥1.66 Cyb≥1.66 Cyb≥1.66	SMD only, for Test #7, 8, 9 & 10, 10 All qualificate	tion parts submitted for testing. 3 wafer lots 3 wafer lots 3 wafer lots 3 Assembly lots 3 Assembly lots 3 wafer lots 3 wafer lots 3 wafer lots 3 wafer lots 1 wafer lot 1 wafer lot 1 wafer lot 1 xasembly lot 1 Assembly lot	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X = Test Needed	Pass Pass Pass Pass Pass Pass Pass Pass	X X X X X X X X X X X X X X X X X X X	Pass Pass Pass Pass Pass Pass Pass Pass

Submitted By: Approved By:

CH Hsu 2021/01/28 Frank Chen, 3/30/2021