

Surface Mount Fast Recovery Rectifiers

FEATURES

- Glass passivated chip junction
- Ideal for automated placement
- Fast switching for high efficiency
- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

MECHANICAL DATA

Case: DO-214AC (SMA)

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - Green compound (halogen-free)

Base P/N with prefix "H" on packing code - AEC-Q101 qualified **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity: Indicated by cathode band **Weight:** 0.06 g (approximately)







DO-214AC (SMA)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	RS	RS	RS	RS	RS	RS	RS	UNIT
. 7 10 10 1 2 1 2 1 1	STWBGE	2AA	2BA	2DA	2GA	2JA	2KA	2MA	01411
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}				1.5				Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50			Α				
Maximum instantaneous forward voltage (Note 1) @ 1.5 A	V _F	1.3		٧					
Maximum reverse current @ rated VR T_J =25 $^{\circ}$ C T_J =125 $^{\circ}$ C	I _R	5 200				μΑ			
Maximum reverse recovery time (Note 2)	Trr	150 250 500		ns					
Typical junction capacitance (Note 3)	Cj	50		pF					
Typical thermal resistance	$R_{\theta JL}$	18			°C/W				
Typical tricimal resistance	$R_{\theta JA}$	55			C/VV				
Operating junction temperature range	T _J	- 55 to +150		оС					
Storage temperature range	- 55 to +150			οС					

Note 1: Pulse test with PW=300µs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



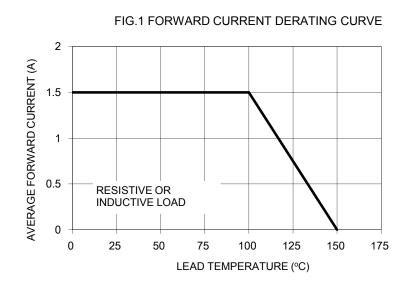
ORDERING INFORMATION						
PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
	QUALIFIED		CODE			
		R3		SMA	1,800 / 7" Plastic reel	
Prefix "l RS2xA (Note 1)		R2	Suffix "G"	SMA	7,500 / 13" Paper reel	
	Prefix "H"	M2		SMA	7,500 / 13" Plastic reel	
		F3		Folded SMA	1,800 / 7" Plastic reel	
		F2		Folded SMA	7,500 / 13" Paper reel	
		F4		Folded SMA	7,500 / 13" Plastic reel	
Γ	NI/A	E3		Clip SMA	1,800 / 7" Plastic reel	
N/A		E2		Clip SMA	7,500 / 13" Plastic reel	

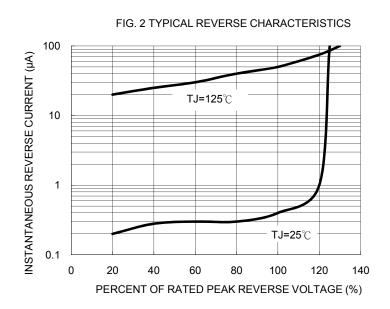
Note 1: "x" defines voltage from 50V (RS2AA) to 1000V (RS2MA)

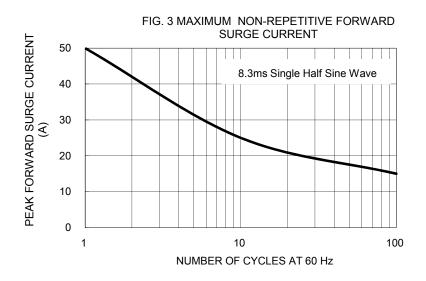
EXAMPLE						
DDEEEDDED D/N	PART NO.	AEC-Q101	PACKING CODE	GREEN COMPOUND	DESCRIPTION	
TREFERINGED T/N		QUALIFIED		CODE	DESCRIT FION	
RS2MA R3	RS2MA		R3			
RS2MA R3G	RS2MA		R3	G	Green compound	
RS2MAHR3	RS2MA	Н	R3		AEC-Q101 qualified	

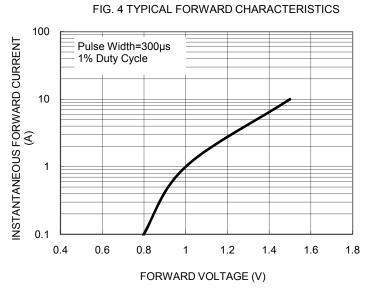
RATINGS AND CHARACTERISTICS CURVES

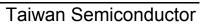
(TA=25°C unless otherwise noted)













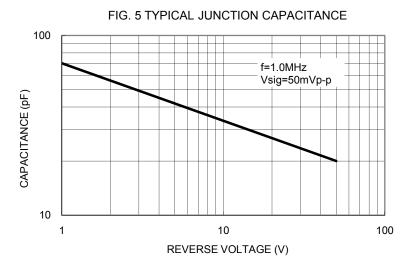
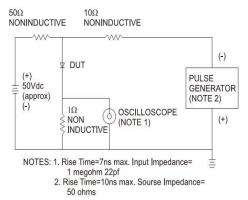
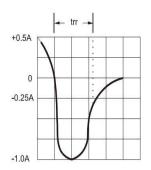
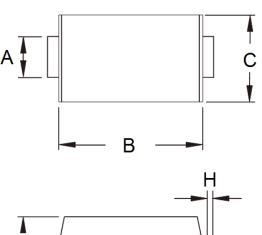


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





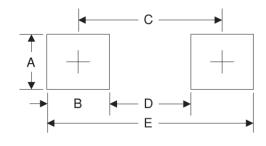
PACKAGE OUTLINE DIMENSIONS



			H
<u>T</u>			
D V			
	E	† G	}
	—	F -	

DIM.	Unit (mm)		Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	1.27	1.58	0.050	0.062	
В	4.06	4.60	0.160	0.181	
С	2.29	2.83	0.090	0.111	
D	1.99	2.50	0.078	0.098	
Е	0.90	1.41	0.035	0.056	
F	4.95	5.33	0.195	0.210	
G	0.10	0.20	0.004	0.008	
Н	0.15	0.31	0.006	0.012	

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	1.68	0.066
В	1.52	0.060
С	3.93	0.155
D	2.41	0.095
E	5.45	0.215

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YW = Date Code F = Factory Code





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