

# 1.5A, 50V - 1400V Glass Passivated Bridge Rectifiers

### **FEATURES**

- Ideal for automated placement
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- UL Recognized File # E-326854
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21







### MECHANICAL DATA

Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0

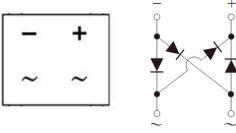
Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test **Polarity:** Polarity as marked on the body

Weight: 0.36 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)											
PARAMETER	SYMBOL	DBL	DBL	DBL	DBL	DBL	DBL	DBL	DBL	DBL	UNIT
PARAIVIETER		151G	152G	153G	154G	155G	156G	157G	158G	159G	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	1400	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	840	980	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1200	1400	V
Maximum average forward rectified current	I <sub>F(AV)</sub>					1.5					Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50				Α					
Rating for fusing (t<8.3ms)	l <sup>2</sup> t					10.3					A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) $I_F$ = 1.5 A	V <sub>F</sub>	1.1 1.25			25	V					
Maximum reverse current @ rated $V_R$ $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I <sub>R</sub>	2 500				μA					
Typical junction capacitance per leg (Note 2)	CJ	25				pF					
Typical thermal resistance	$R_{ hetaJL}$ $R_{ hetaJA}$	15 40				°C/W					
Operating junction temperature range T <sub>J</sub>		- 55 to +150							°C		
Storage temperature range	T <sub>STG</sub>	- 55 to +150							°C		

Note 1: Pulse Test with PW=300µs,1% Duty Cycle

Note 2: Measure at 1.0MHz and Applied Reverse Voltage of 4.0 Volts D.C.



ORDERING INFORMATION							
PART NO.	PACKING CODE	PACKING CODE	PACKING CODE SUFFIX <sup>(*)</sup>	PACKAGE	PACKING		
DBL15xG (Note 1)	Н	C1	G	DBL	50 / TUBE		

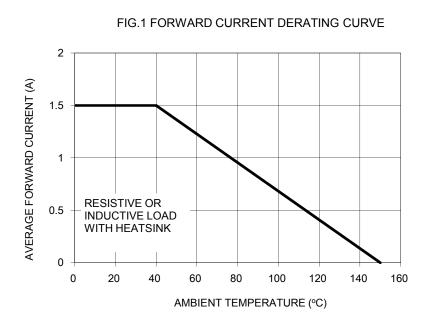
Note 1: "x" defines voltage from 50V (DBL151G) to 1400V (DBL159G)

<sup>\*:</sup> Optional available

EXAMPLE							
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION		
DBL157GHC1G	DBL157G	Н	C1	G	AEC-Q101 qualified Green compound		

### RATINGS AND CHARACTERISTICS CURVES

(T<sub>A</sub>=25°C unless otherwise noted)



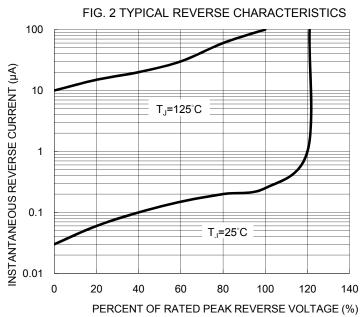
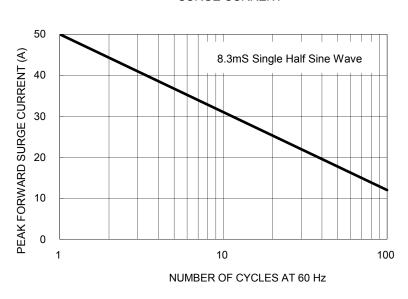


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



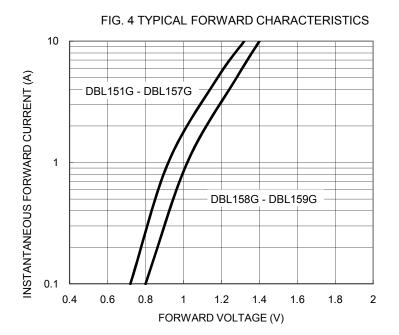
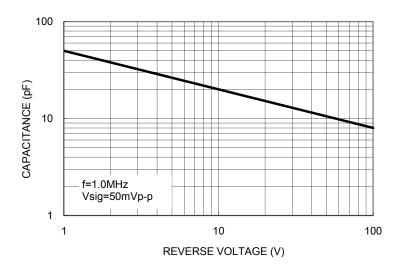


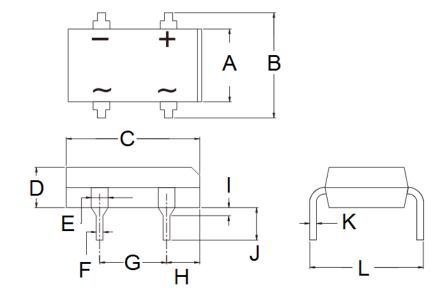


FIG. 5 TYPICAL JUNCTION CAPACITANCE



## PACKAGE OUTLINE DIMENSIONS

## DBL



DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min	Max	Min	Max		
Α	6.20	6.50	0.244	0.256		
В	7.24	8.00	0.285	0.315		
С	8.12	8.51	0.320	0.335		
D	2.40	2.60	0.094	0.102		
Е	0.89	1.14	0.035	0.045		
F	0.46	0.58	0.018	0.023		
G	5.00	5.20	0.197	0.205		
Н	1.39	1.90	0.055	0.075		
I	1.27	2.03	0.050	0.080		
J	3.81	4.69	0.150	0.185		
K	0.22	0.33	0.009	0.013		
L	7.60	8.90	0.299	0.350		

## MARKING DIAGRAM



P/N = Specific Device Code

G = Green Compound

YW = Date Code

= Factory Code



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