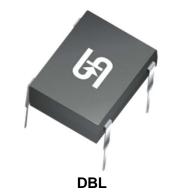


# 1.5A, 50V - 1400V Glass Passivated Bridge Rectifiers

### **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

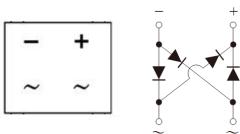
Part no. with suffix "H" means AEC-Q101 qualified

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	STINIBOL	151G	152G	153G	154G	155G	156G	157G	158G	159G	JIVI
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	V
Maximum reverse current @ rated $V_R$ $T_J$ =25°C $T_J$ =125°C	I <sub>R</sub>	2 500				μA					
Typical junction capacitance per leg (Note 2)	CJ					25					pF
Typical thermal resistance	$R_{ hetaJL}$	15 40			°C/W						
Operating junction temperature range	TJ				- 5	55 to +1	50				°C
Storage temperature range	T <sub>STG</sub>				- 5	55 to +1	50				°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		

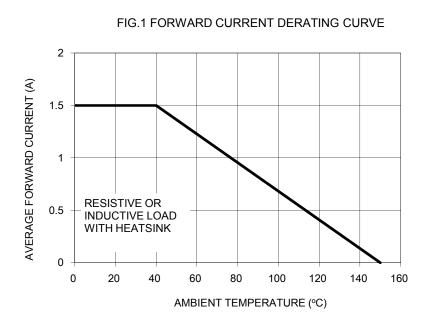
Note 1: "x" defines voltage from 50V (DBL151G) to 1400V (DBL159G)

<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)



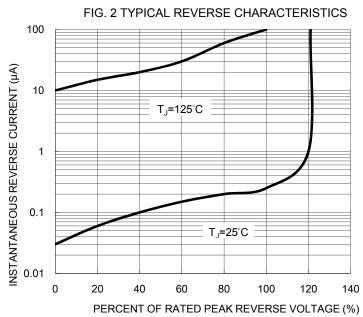
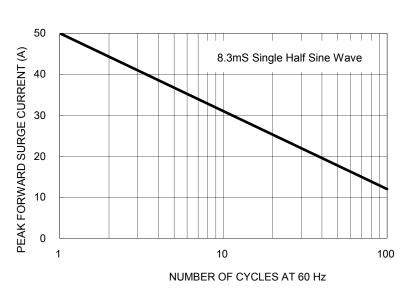


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



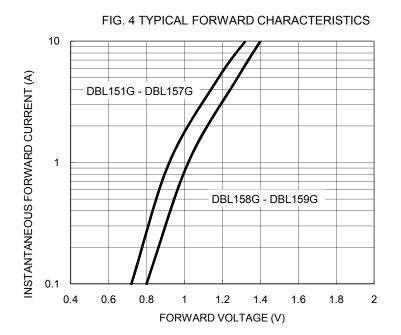
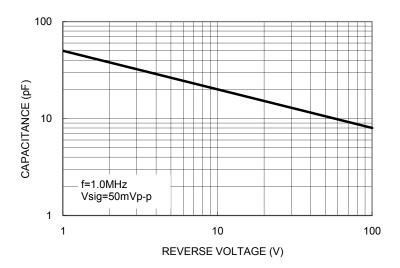
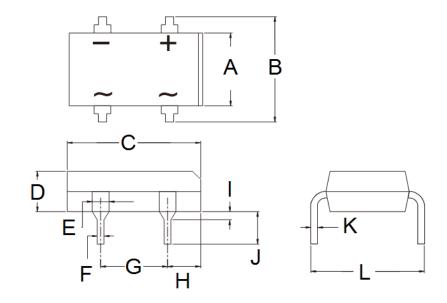




FIG. 5 TYPICAL JUNCTION CAPACITANCE



# 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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DBL154G C1 DBL154G C1G DBL158GHC1G DBL153G C1G DBL157G C1G DBL159G C1G DBL159G C1

DBL159GHC1G DBL152GHC1G DBL154GHC1G DBL158G C1G DBL156GHC1G DBL155G C1G DBL157GHC1G

DBL156G C1G DBL151GHC1G DBL153GHC1G DBL151G C1G DBL155GHC1G DBL157G C1

DBL153G C1 DBL152G C1 DBL158G C1 DBL156G C1 DBL155G C1