

Glass Passivated Bridge Rectifiers

FEATURES

- UL Recognized File # E-326854
- Ideal for automated placement
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- 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


DBLS


MECHANICAL DATA

Case : Molded plastic body

Molding compound, UL flammability classification rating 94V-0

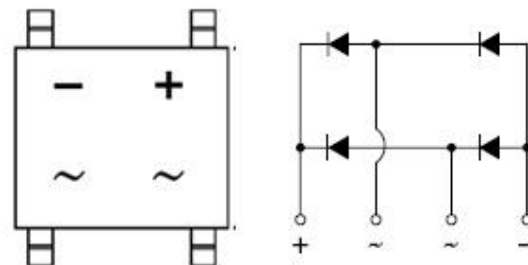
Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

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

Meet JESD 201 class 1A whisker test

Polarity : Polarity as marked on the body

Weight : 0.36 gram (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	DBLS 101G	DBLS 102G	DBLS 103G	DBLS 104G	DBLS 105G	DBLS 106G	DBLS 107G	UNIT
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							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	40					30		A
Maximum instantaneous forward voltage (Note 1) IF= 1 A	V _F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	T _J =25 °C T _J =125°C I _R	2 100							uA
Typical junction capacitance Per Leg (Note 2)	Cj	25							pF
Typical thermal resistance	R _{θjL} R _{θjA}	15 40							°C/W
Operating junction temperature range	T _J	- 55 to + 150							°C
Storage temperature range	T _{STG}	- 55 to + 150							°C

Note 1: Pulse Test with PW=300 usec, 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	GREEN COMPOUND CODE	PACKAGE	PACKING
DBLS10xG (Note 1)	C1	Suffix "G"	DBLS	50 / TUBE
	RD			1500 / 13" Paper reel

Note 1: "x" defines voltage from 50V (DBLS101G) to 1000V (DBLS107G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
DBLS107G RD	DBLS107G	RD		
DBLS107G RDG	DBLS107G	RD	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

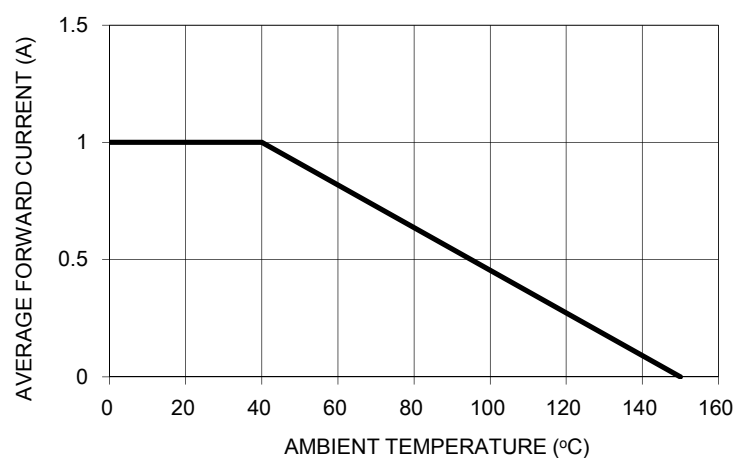


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

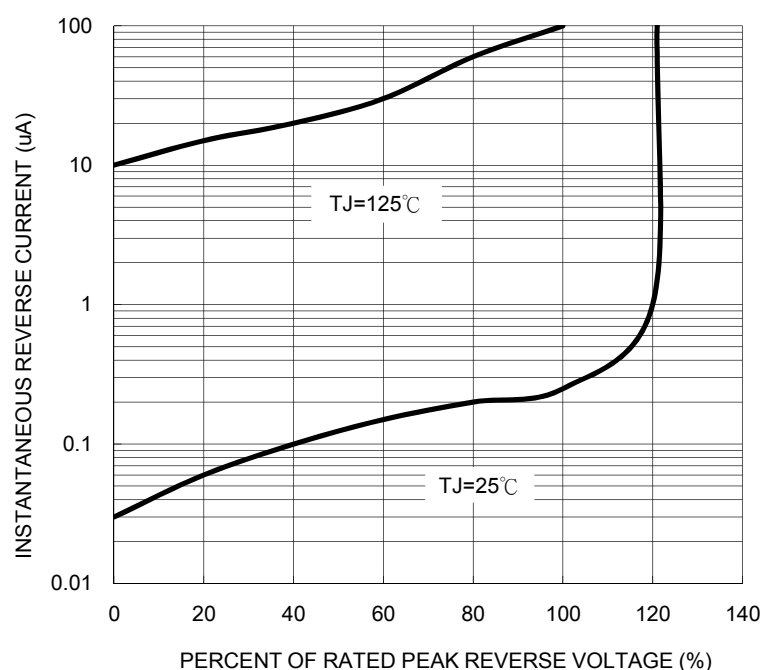


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

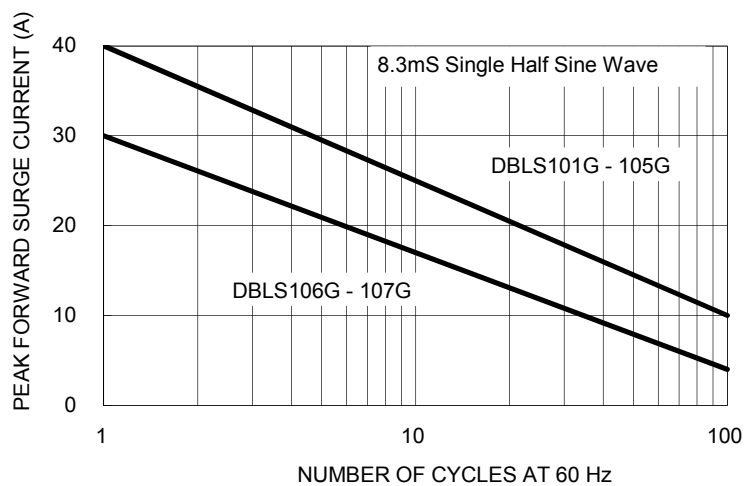


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

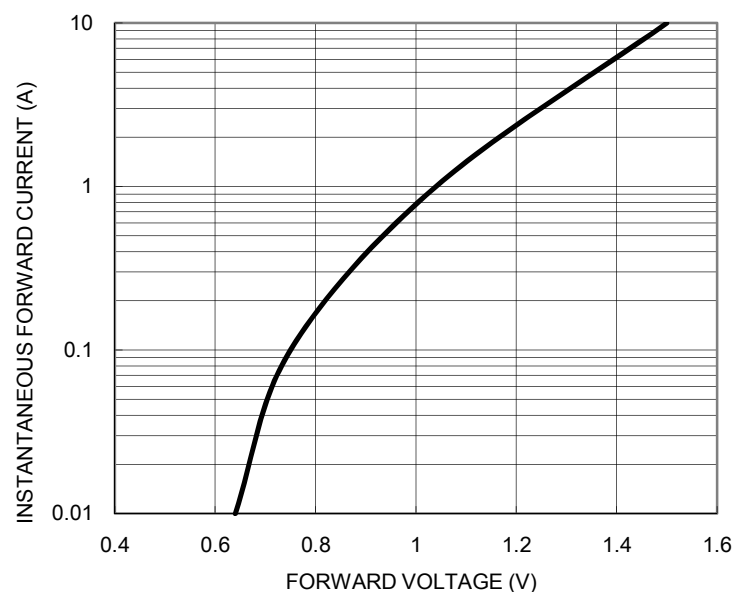
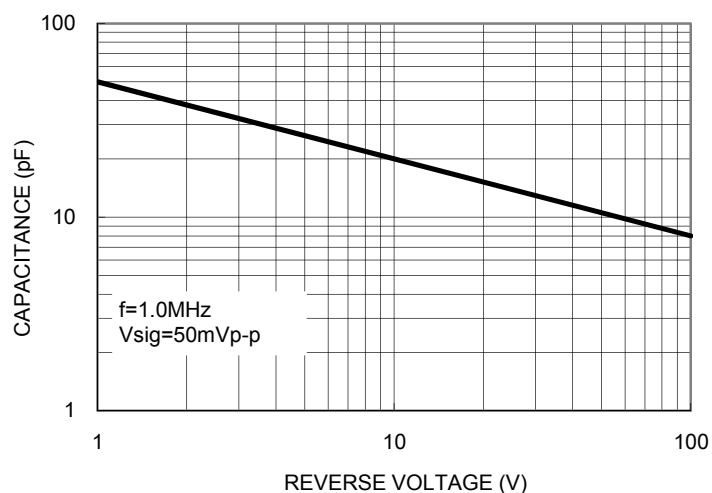
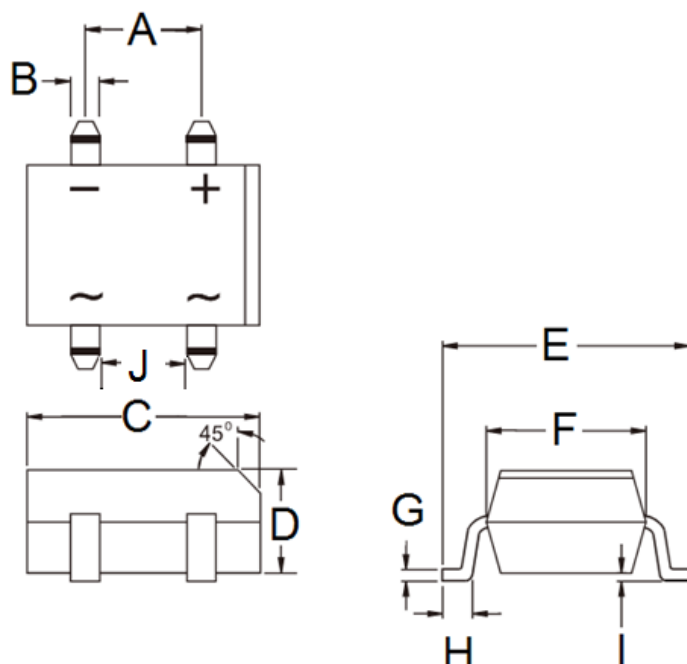


FIG. 5 TYPICAL JUNCTION CAPACITANCE

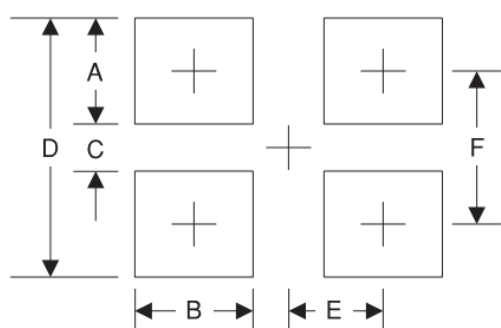


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	5.00	5.20	0.197	0.205
B	1.02	1.20	0.040	0.047
C	8.13	8.51	0.320	0.335
D	2.40	2.60	0.094	0.102
E	9.80	10.30	0.386	0.406
F	6.20	6.50	0.244	0.256
G	0.22	0.33	0.009	0.013
H	1.02	1.53	0.040	0.060
I	0.076	0.33	0.003	0.013
J	3.90	4.10	0.154	0.161

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	2.3
B	1.3
C	6.9
D	11.5
E	2.6
F	9.2

MARKING DIAGRAM



P/N = Specific Device Code
G = Green Compound
YW = Date Code
F = Factory Code