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
- 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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0

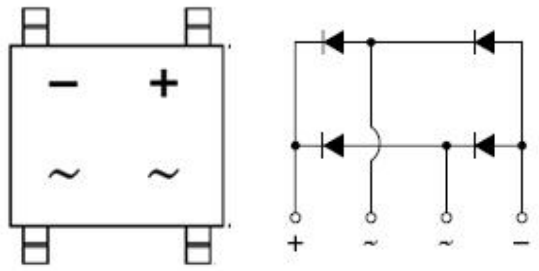
Base P/N with suffix "G" on packing code - halogen-free

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 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)											
PARAMETER	SYMBOL	DBLS 151G	DBLS 152G	DBLS 153G	DBLS 154G	DBLS 155G	DBLS 156G	DBLS 157G	DBLS 158G	DBLS 159G	UNIT
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	$I_{F(AV)}$	1.5									A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	50									A
Rating for fusing (t<8.3ms)	I^2t	10.3									A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 1.5 A	V_F	1.1							1.25		V
Maximum DC reverse current T_J=25 ℃ at rated DC blocking voltage T_J=125℃	I_R	2 500									μA
Typical thermal resistance	$R_{\theta jL}$ $R_{\theta jA}$	15 40									$^OC/W$
Operating junction temperature range	T_J	- 55 to +150									^OC
Storage temperature range	T_{STG}	- 55 to +150									^OC

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

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
DBLS15xG (Note 1)	C1	Suffix "G"	DBLS	50 / TUBE
	RD			1,500 / 13" Paper reel

Note 1: "x" defines voltage from 50V (DBLS151G) to 1400V (DBLS159G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
DBLS157G RD	DBLS157G	RD		
DBLS157G RDG	DBLS157G	RD	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

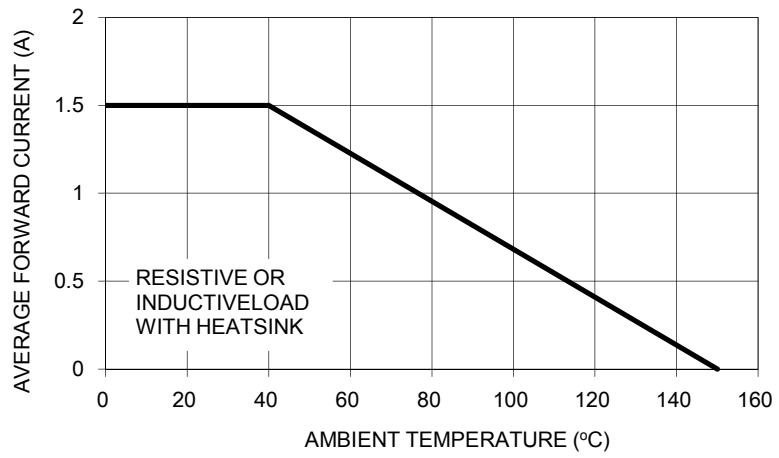


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

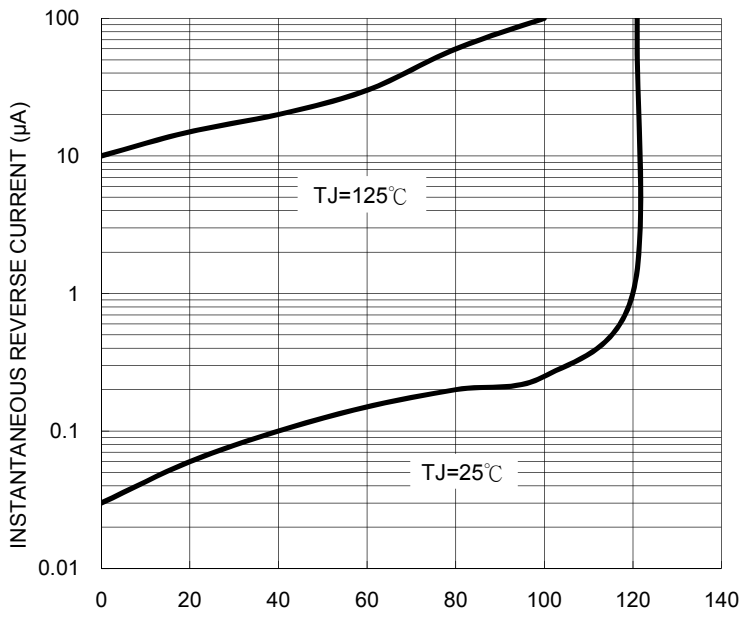


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

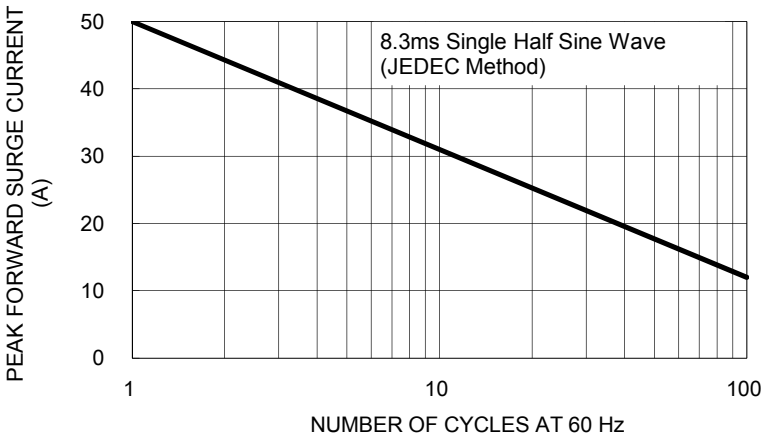


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

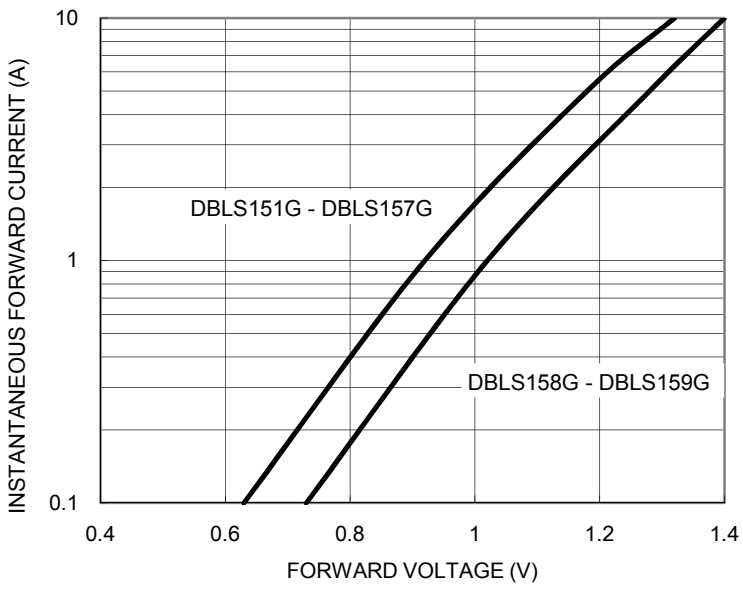
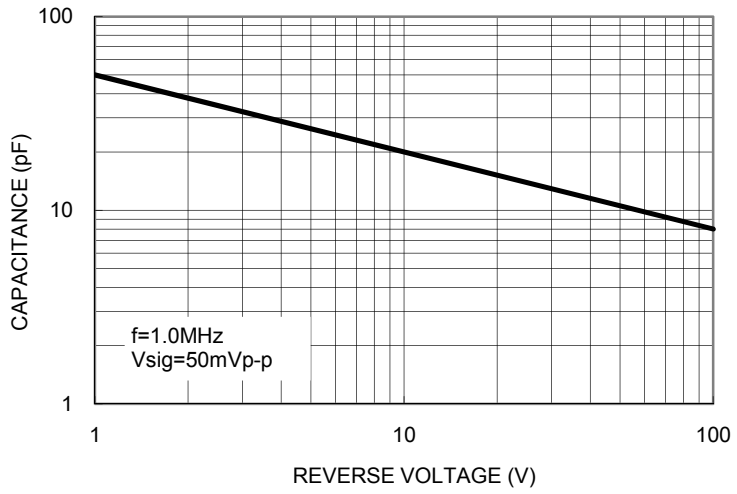
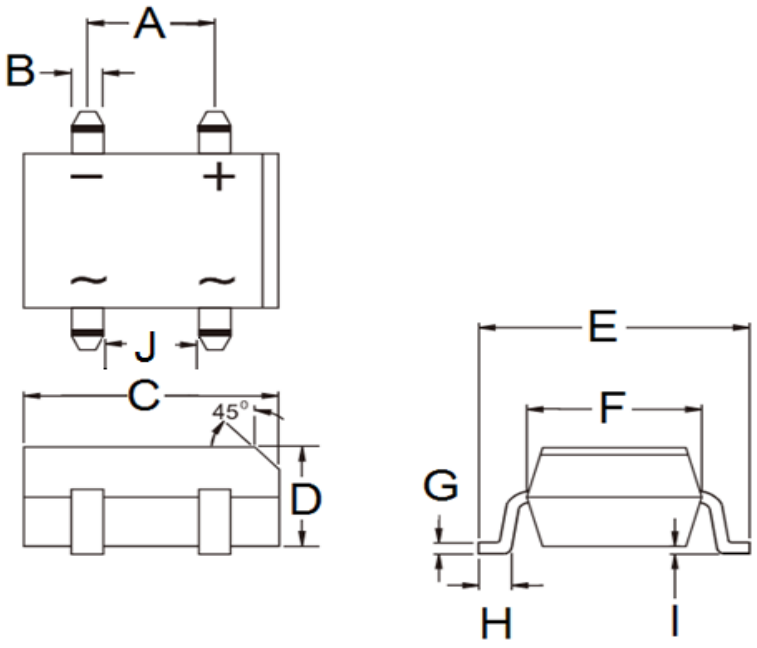


FIG. 5 TYPICAL JUNCTION CAPACITANCE

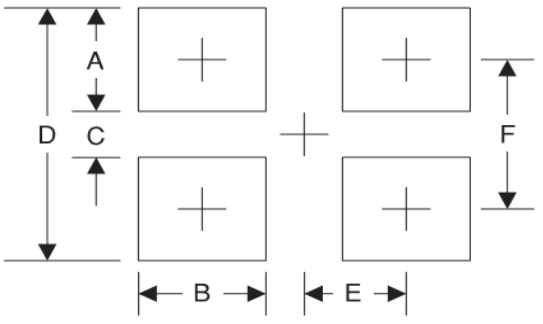


PACKAGE OUTLINE DIMENSIONS



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)	Unit (inch)
A	2.3	0.091
B	1.3	0.051
C	6.9	0.272
D	11.5	0.453
E	2.6	0.102
F	9.2	0.362

MARKING DIAGRAM

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

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