

### 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**



**MECHANICAL DATA**

**Case:** Molded plastic body

Molding compound, UL flammability classification rating 94V-0

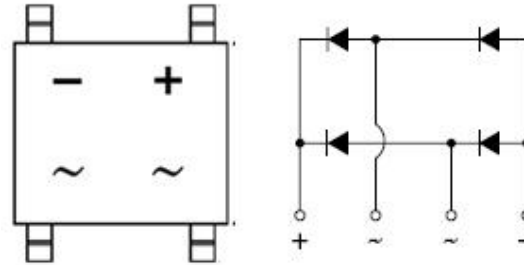
Base P/N with suffix "G" on packing code - halogen-free

**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 <sub>A</sub> =25°C unless otherwise noted)												
PARAMETER	SYMBOL	DBLS 201G	DBLS 202G	DBLS 203G	DBLS 204G	DBLS 205G	DBLS 206G	DBLS 207G	DBLS 208G	DBLS 209G	UNIT	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	1400	V	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	840	980	V	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	1200	1400	V	
Maximum average forward rectified current	I <sub>F(AV)</sub>	2									A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50									A	
Rating for fusing (t<8.3ms)	i <sup>2</sup> t	10.3									A <sup>2</sup> s	
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 2 A	V <sub>F</sub>	1.15						1.30			V	
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	T <sub>J</sub> =25 °C					T <sub>J</sub> =125°C					μA
Typical thermal resistance	R <sub>θJL</sub>	15									°C/W	
	R <sub>θJA</sub>	40										
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

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
DBLS20xG (Note 1)	C1	Suffix "G"	DBLS	50 / TUBE
	RD			1,500 / 13" Paper reel

Note 1: "x" defines voltage from 50V (DBLS201G) to 1400V (DBLS209G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
DBLS207G RD	DBLS207G	RD		
DBLS207G RDG	DBLS207G	RD	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

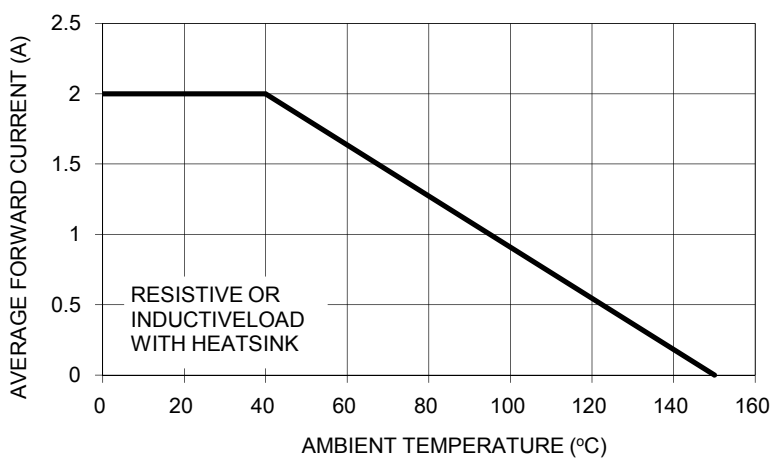


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

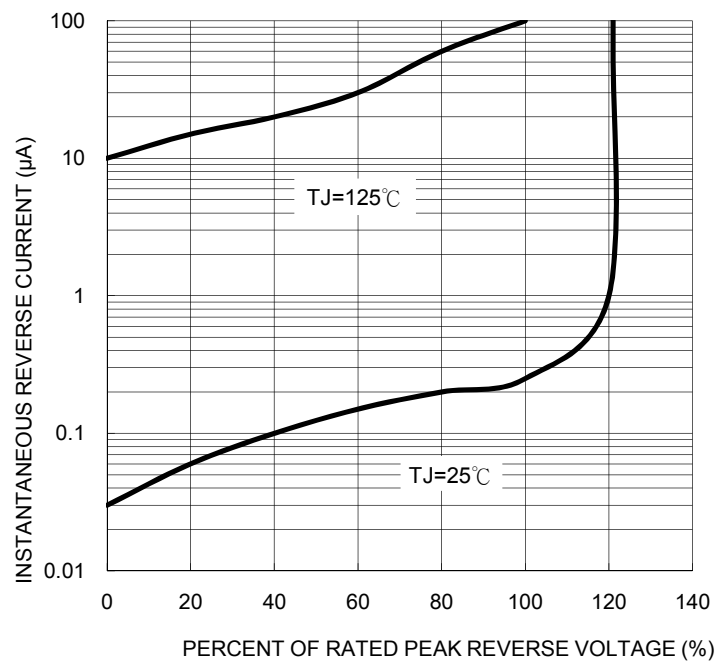


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

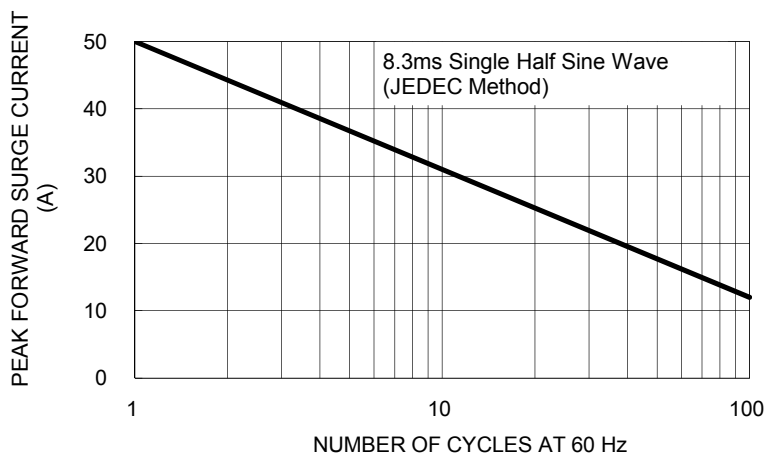


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

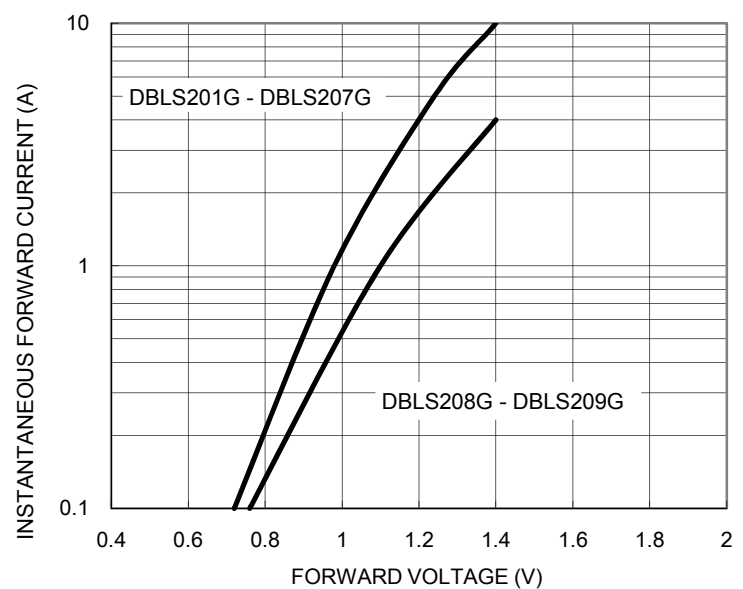
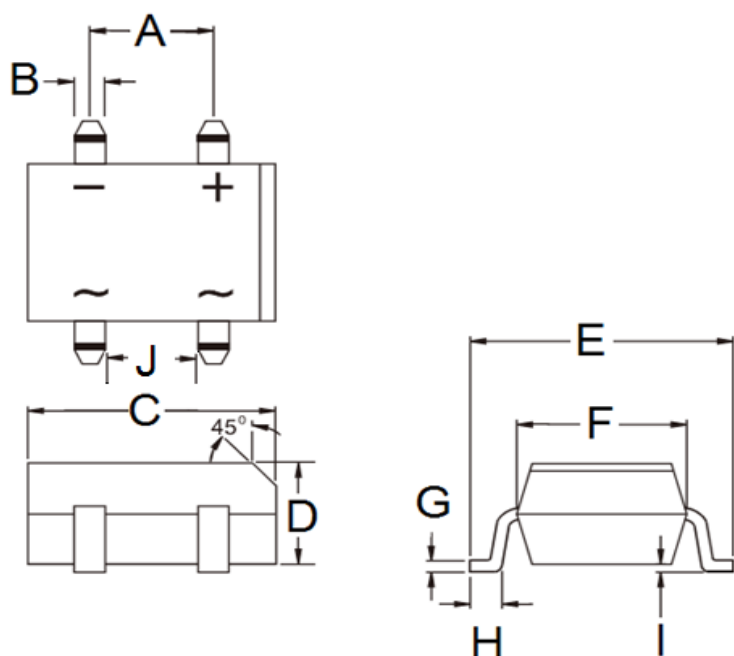


FIG. 5 TYPICAL JUNCTION CAPACITANCE

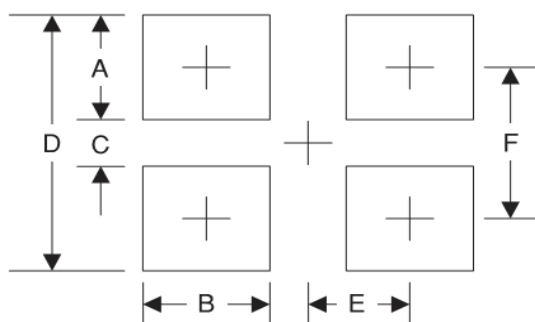


PACKAGE OUTLINE DIMENSIONS



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)	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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