

## 1.5A, 400V - 1000V Glass Passivated Bridge Rectifiers

### FEATURES

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



DBLS

### MECHANICAL DATA

**Case:** Molded plastic body

Molding compound: UL flammability classification rating 94V-0

Moisture sensitivity level (MSL): level 1, per J-STD-020

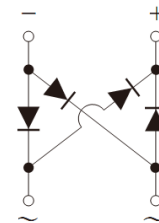
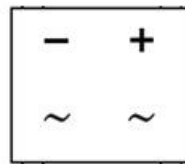
Packing code with suffix "G" means green compound (halogen free)

**Terminal:** Matte tin plated leads, solderable per J-STD-002

Meet JESD 201 class 1A whisker test

**Polarity:** Polarity as marked on the body

**Weight:** 0.36 g (approximately)



<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ unless otherwise noted)						
PARAMETER	SYMBOL	DBLS 154G-T	DBLS 155G-T	DBLS 156G-T	DBLS 157G-T	UNIT
Marking code		DBLS 154G	DBLS 155G	DBLS 156G	DBLS 157G	
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	400	600	800	1000	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 ( $t < 8.3\text{ms}$ )	$I^2t$	10.3				$\text{A}^2\text{s}$
Maximum instantaneous forward voltage (Note 1) $I_F = 1.5\text{ A}$	$V_F$	1.1				V
Maximum reverse current @ rated $V_R$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_R$	2 500				$\mu\text{A}$
Typical thermal resistance	$R_{\theta J L}$ $R_{\theta J A}$	15 40				$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	- 55 to +150				$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to +150				$^\circ\text{C}$

Note 1: Pulse Test with  $PW=300\mu\text{s}$ , 1% duty cycle

ORDERING INFORMATION					
PART NO.	PACKING CODE	PACKAGE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
DBLS15xG-T (Note 1)	C1	DBLS	G	DBLS	50 / TUBE
	RD				1,500 / 13" Paper reel

Note 1: "x" defines voltage from 400V (DBLS154G-T) to 1000V (DBLS157G-T)

\*: Optional available

EXAMPLE				
EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
DBLS157G-T RDG	DBLS157G-T	RD	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

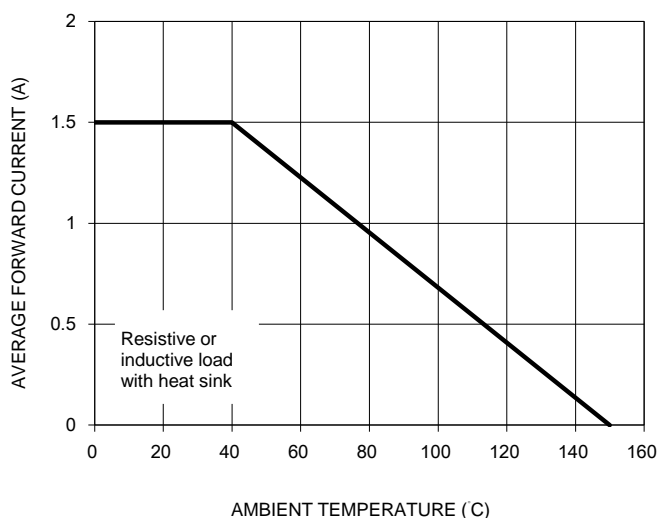


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

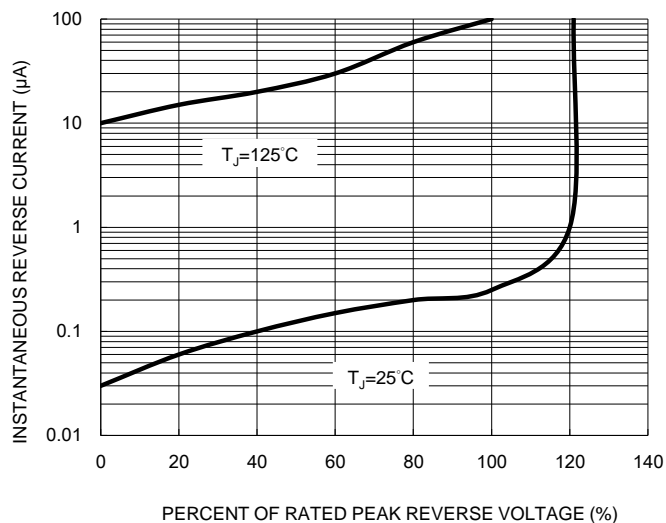


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

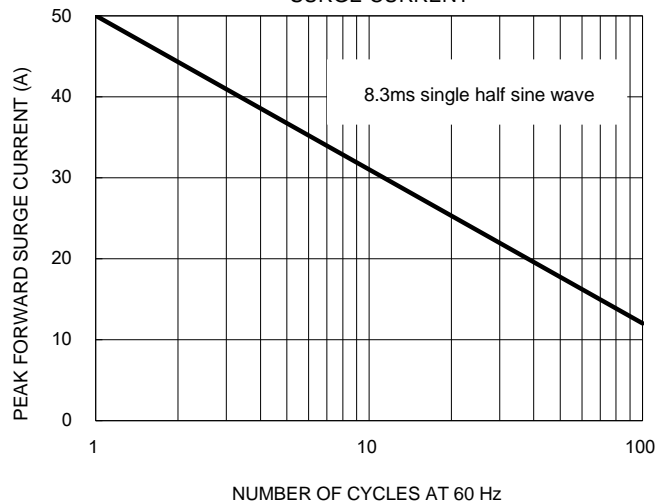


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

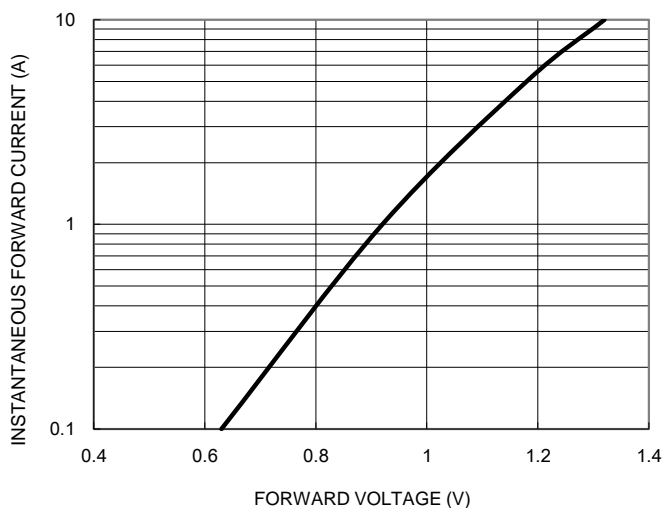
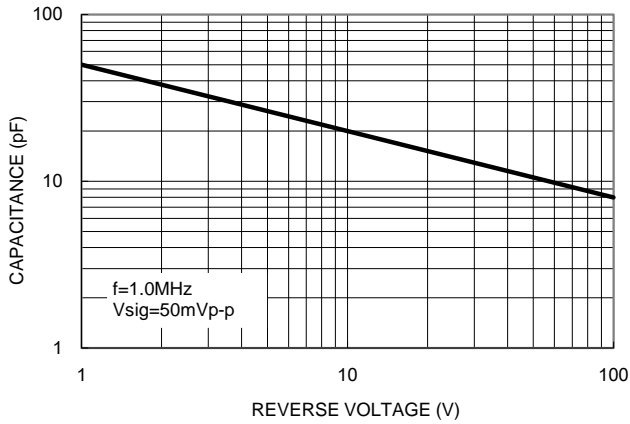
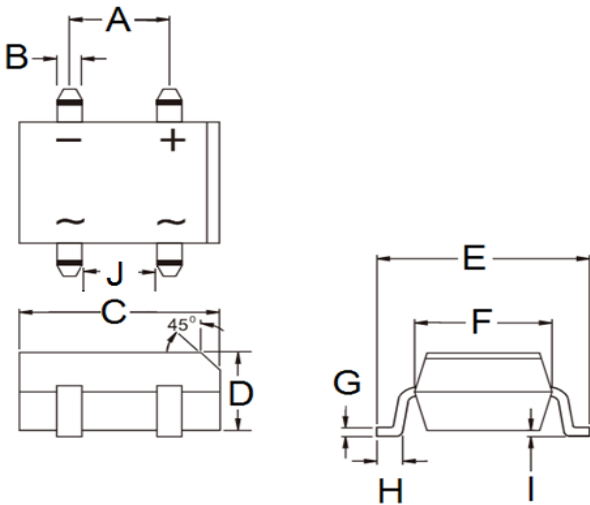


FIG. 5 TYPICAL JUNCTION CAPACITANCE

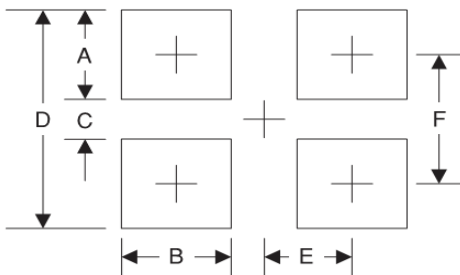


**PACKAGE OUTLINE DIMENSIONS**  
**DBLS**



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	2.35	2.60	0.093	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 = Marking Code
- G = Green Compound
- YW = Date Code
- F = Factory Code

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