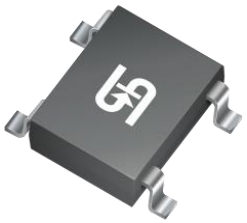
1.5A, 400V - 1000V Glass Passivated Bridge Rectifiers

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



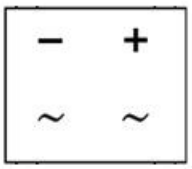
Pb-Free

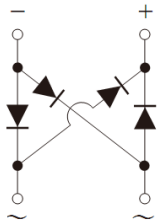
RoHS COMPLIANT

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)





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°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<8.3ms)	I^2t	10.3				A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 1.5 A	V_F	1.1				V
Maximum reverse current @ rated V_R T_J=25°C T_J=125°C	I_R	2 500				μA
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	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=300μs,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°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

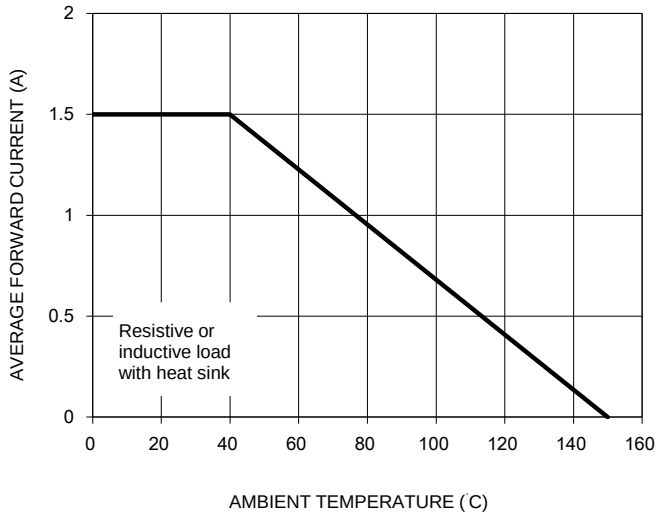


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

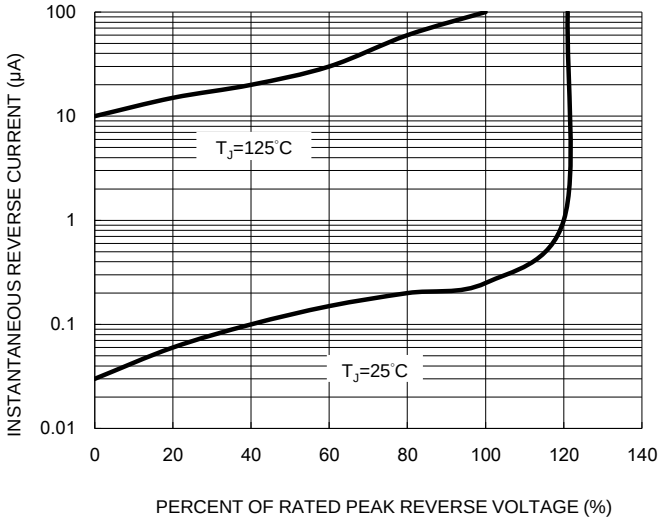


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

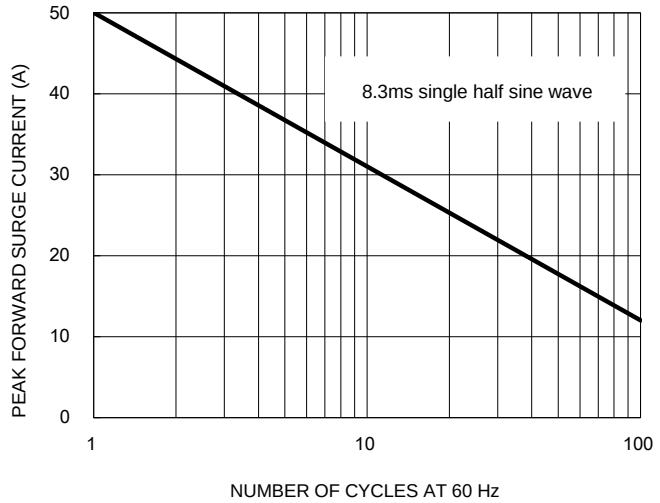


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

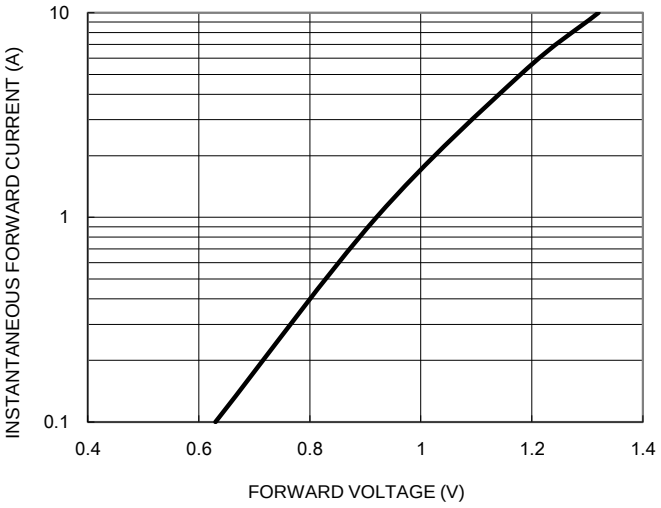
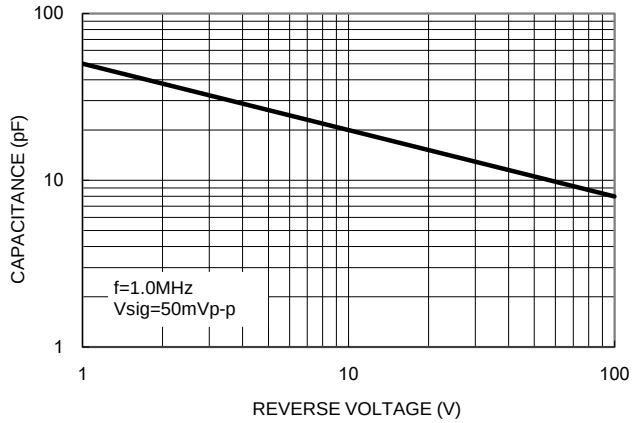
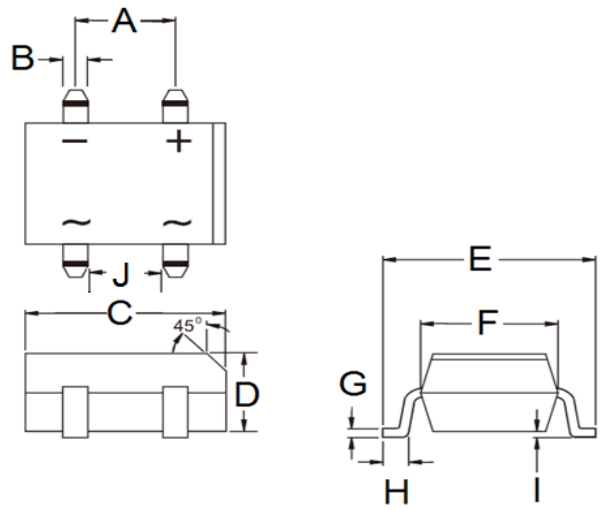


FIG. 5 TYPICAL JUNCTION CAPACITANCE



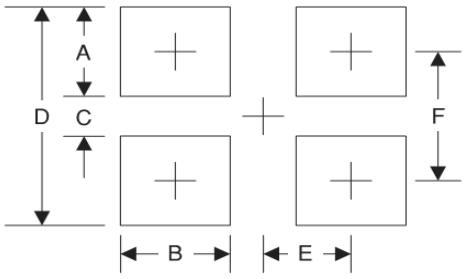
PACKAGE OUTLINE DIMENSIONS

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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