

Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- 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



ABS



MECHANICAL DATA

Case: Molded plastic body

Molding compound, UL flammability classification rating 94V-0

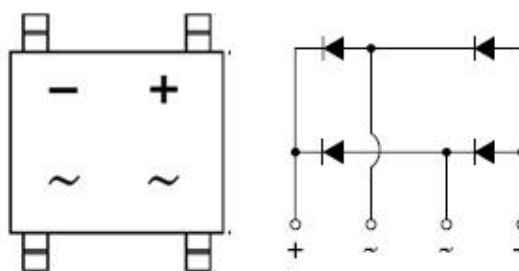
Base P/N with suffix "G" on packing code - green compound (halogen-free)

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

Meet JESD 201 class 1A whisker test

Polarity: Polarity as marked on the body

Weight: 0.12 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)					
PARAMETER	SYMBOL	ABS6-T	ABS8-T	ABS10-T	Unit
Marking code		ABS6	ABS8	ABS10	
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	V
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _{DC}	600	800	1000	V
Maximum average forward rectified current On glass-epoxy On aluminum substrate	I _{F(AV)}		0.8 1.0		A
Peak forward surge current, 8.3 ms single half sine-wave	T _J = 25°C	I _{FSM}	30		A
	T _J = 125°C		25		
Peak forward surge current, 1.0 ms single half sine-wave	T _J = 25°C	I _{FSM}	60		A
	T _J = 125°C		50		
Rating for fusing (t<8.3ms)	I ² t		3.74		A ² s
Maximum instantaneous forward voltage (Note 1) I _F = 0.4 A	V _F		0.95		V
Maximum DC reverse current at rated DC blocking voltage	T _J =25 °C T _J =125°C	I _R	10		μA
			150		
Typical thermal resistance	R _{θJL} R _{θJA}	25		°C/W	
		80			
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	GREEN COMPOUND CODE	PACKAGE	PACKING
ABSxx-T (Note 1)	RE	Suffix "G"	ABS	1,000 / 7" Plastic reel
	RG		ABS	5,000 / 13" Paper reel

Note 1: "xx" defines voltage from 600V (ABS6-T) to 1000V (ABS10-T)

Note 2: For ABS: Packing code (Whole series with green compound)

EXAMPLE

PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
ABS8-T/ABS8 REG	ABS8-T	RE	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

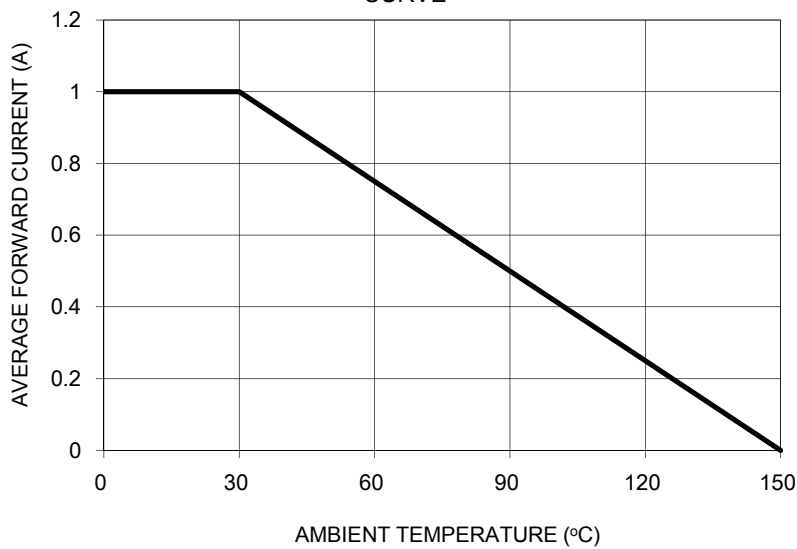


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

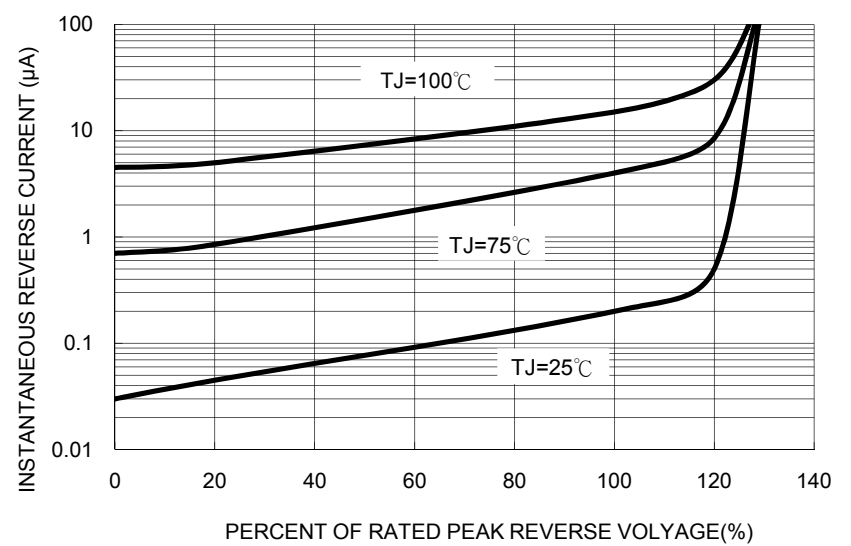


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

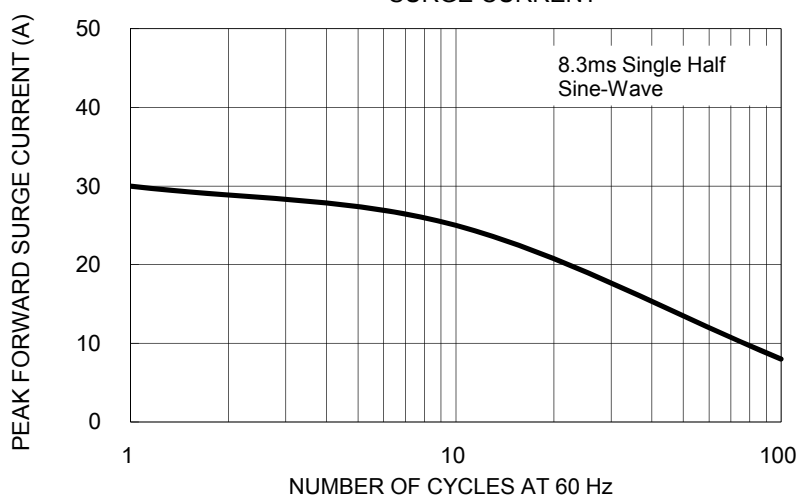


FIG. 4 TYPICAL FORWARD CHARACTERISTIC

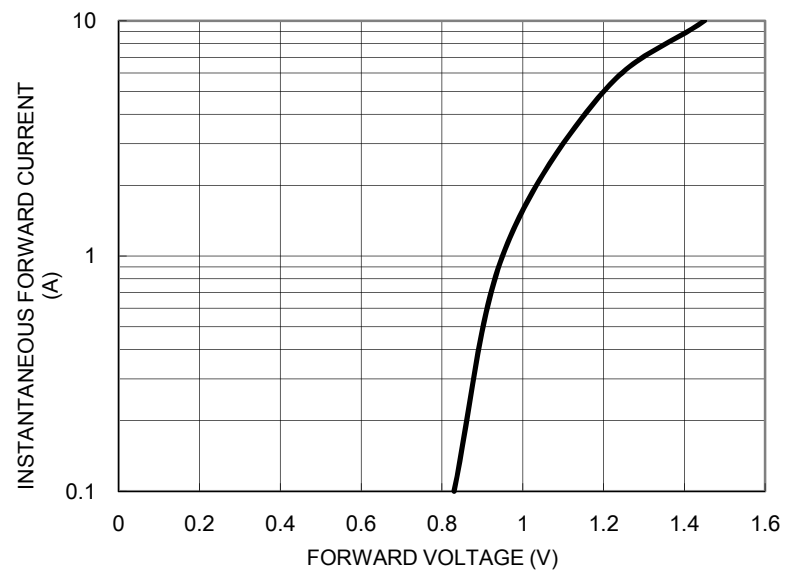
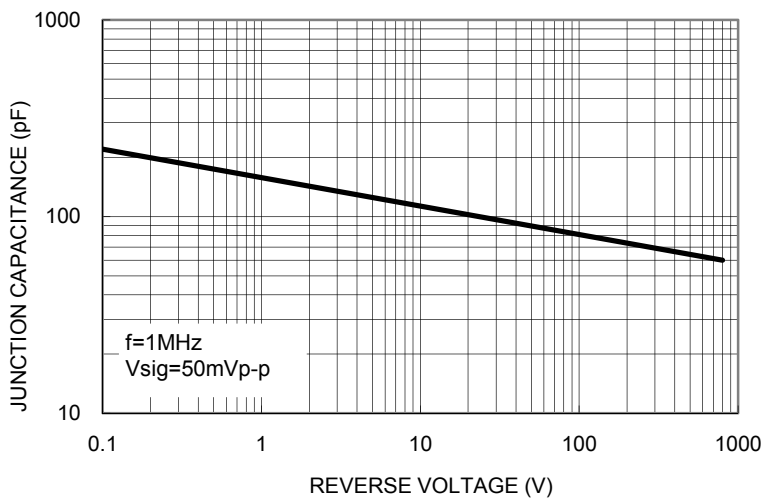
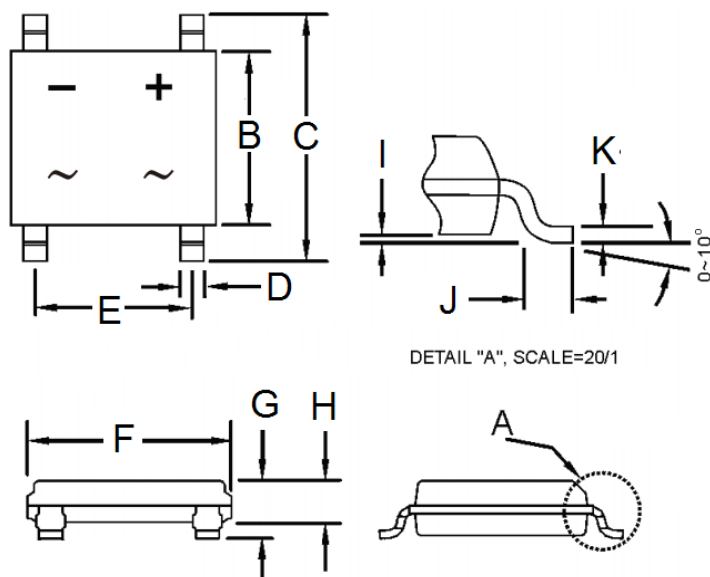


FIG. 5 TYPICAL JUNCTION CAPACITANCE

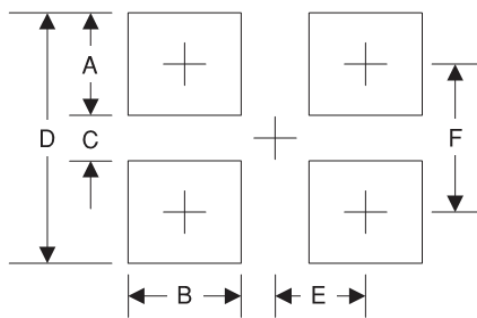


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
B	4.30	4.50	0.169	0.177
C	6.25	6.65	0.246	0.262
D	0.60	0.70	0.024	0.028
E	3.90	4.10	0.154	0.161
F	4.90	5.10	0.193	0.200
G	1.40	1.60	0.055	0.063
H	1.35	1.45	0.053	0.057
I	0.05	0.15	0.002	0.006
J	0.30	0.70	0.012	0.028
K	0.15	0.25	0.006	0.010

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	1.5	0.059
B	0.9	0.035
C	4.22	0.166
D	7.22	0.284
E	2.05	0.081
F	5.72	0.225

MARKING DIAGRAM



P/N = Marking Code
 YW = Date Code
 F = Factory Code

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.