

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

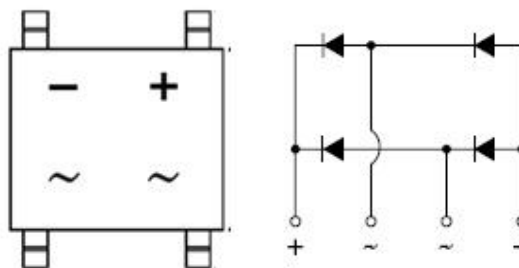
Base P/N with suffix "G" on packing code - green compound (halogen-free)

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 25	A
	T _J = 125°C				
Peak forward surge current, 1.0 ms single half sine-wave	T _J = 25°C	I _{FSM}		60 50	A
	T _J = 125°C				
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	I _R		10 150		μA
Typical thermal resistance	R _{θJL}		25		°C/W
	R _{θJA}		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

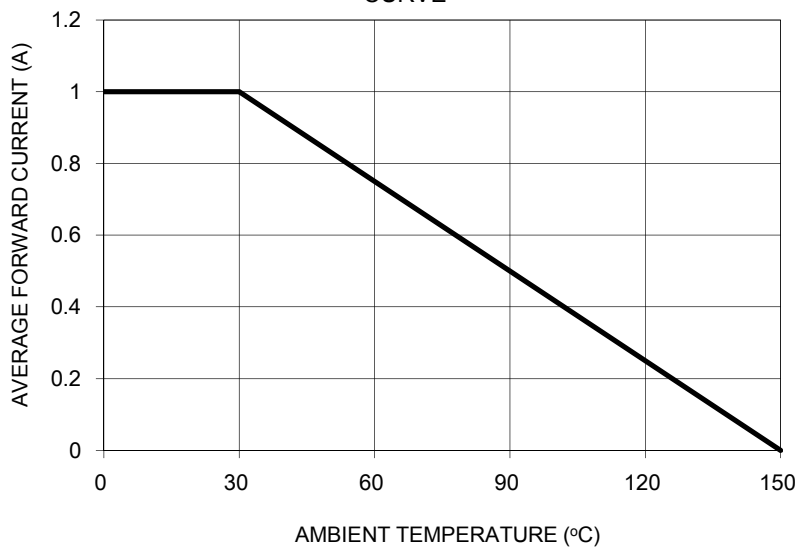


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

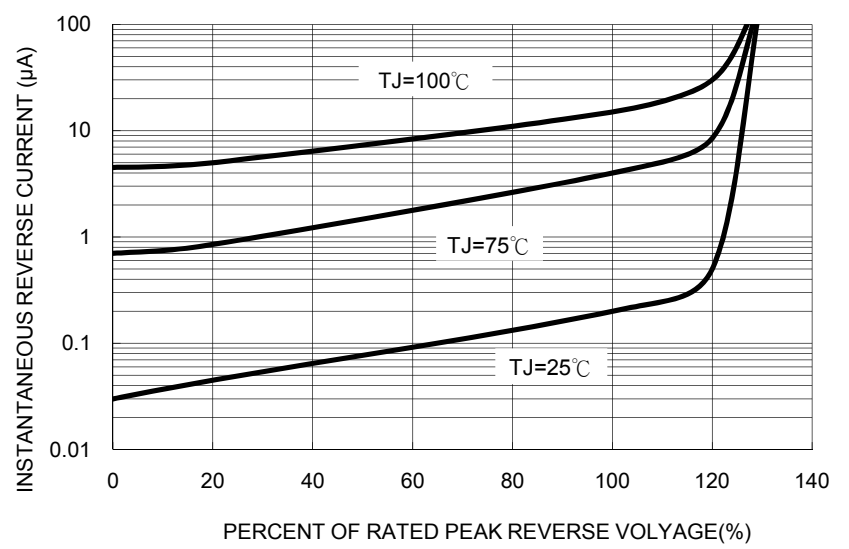


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

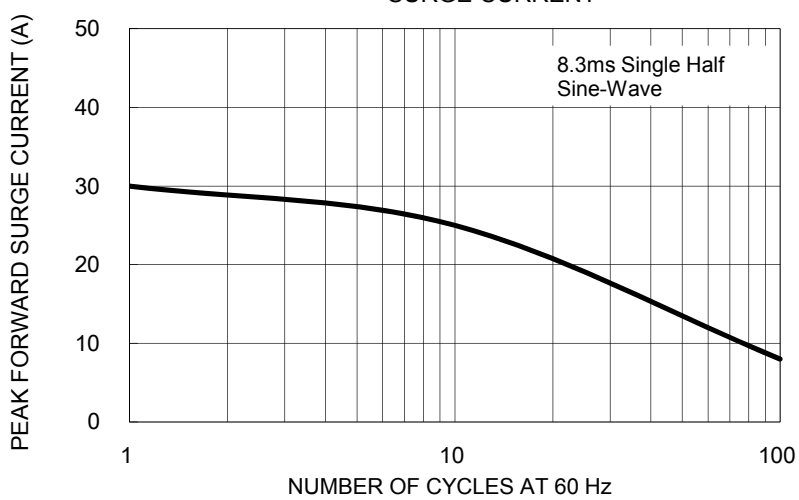


FIG. 4 TYPICAL FORWARD CHARACTERISTIC

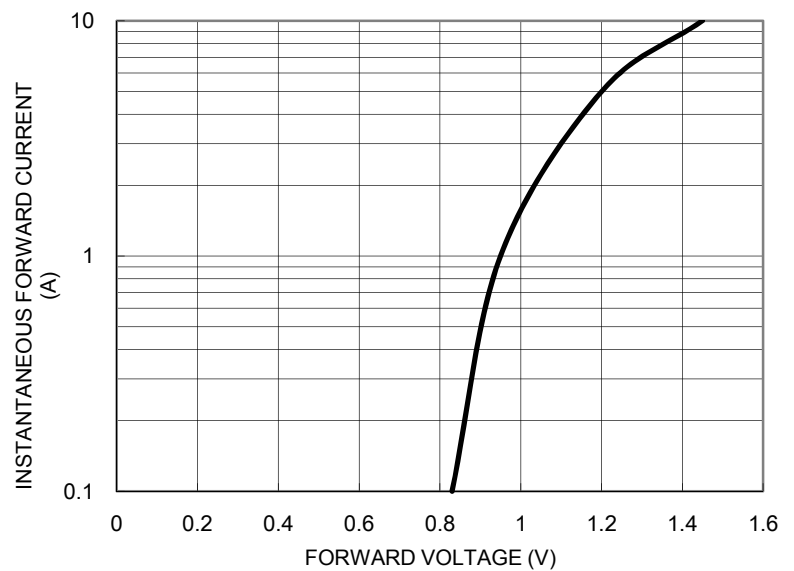
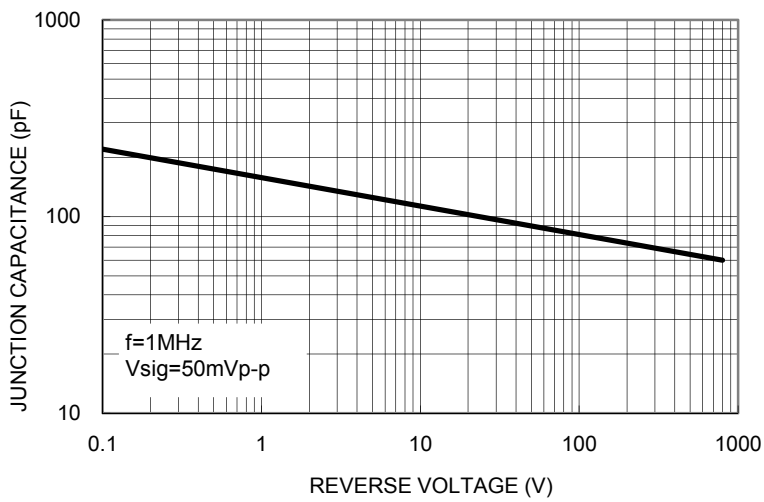
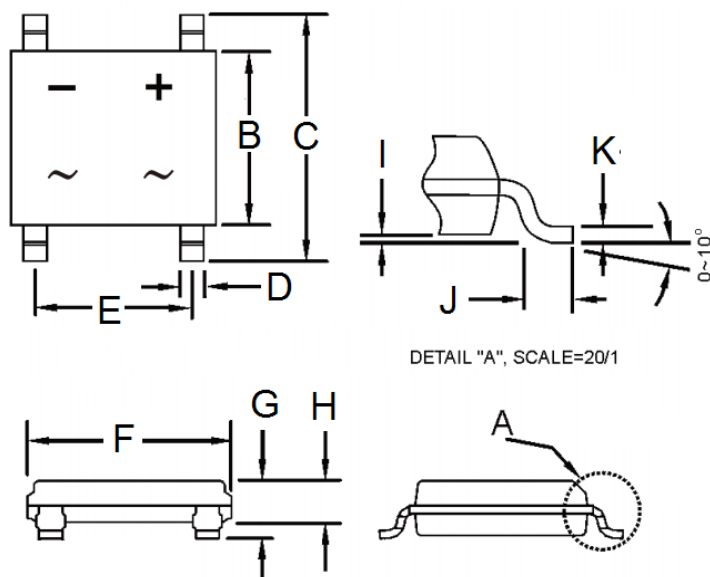


FIG. 5 TYPICAL JUNCTION CAPACITANCE

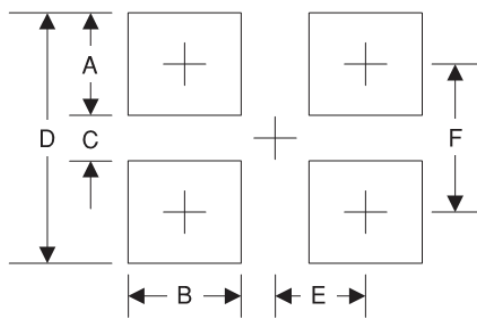


PACKAGE OUTLINE DIMENSIONS



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

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