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 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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

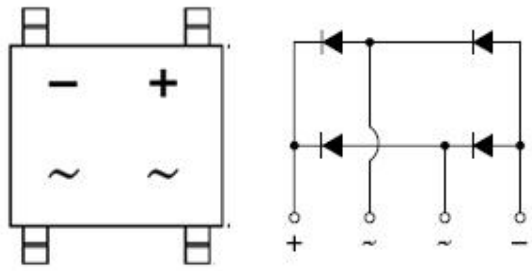
Case：Molded plastic body

Molding compound, UL flammability classification rating 94V-0
Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

Terminal：Matte tin plated leads, solderable per JESD22-B102
Meet JESD 201 class 1A whisker test

Polarity：Polarity as marked on the body

Weight：0.096 gram (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T_A=25℃ unless otherwise noted)				
PARAMETER	SYMBOL	**ABS15J**	**ABS15M**	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	1000	V
Maximum RMS voltage	V_{RMS}	420	700	V
Maximum DC blocking voltage	V_{DC}	600	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}	40		A
Maximum instantaneous forward voltage (Note 1)	V_F	Typ.	Max.	V
IF= 0.5 A		0.88	-	
IF= 1.5 A		0.97	1.00	
Maximum DC reverse current T_A=25 ℃ at rated DC blocking voltage T_A=125℃	I_R	5 150		uA
Rating for fusing (t<8.3mS)	I^2T	6.64		A^2sec
Typical thermal resistance	$R_{\theta JL}$ $R_{\theta JA}$	25 80		$^OC/W$
Operating junction temperature range	T_J	- 55 to + 150		^OC
Storage temperature range	T_{STG}	- 55 to + 150		^OC

Note 1：Pulse test with PW=300u sec, 1% duty cycle

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
ABS15x (Note 1)	RE	Suffix "G"	ABS	1000 / 7" Plastic reel
	RG		ABS	5000 / 13" Paper reel

Note 1: "x" defines voltage from 600V (ABS15J) to 1000V (ABS15M)

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

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
ABS15J REG	ABS15J	RE	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

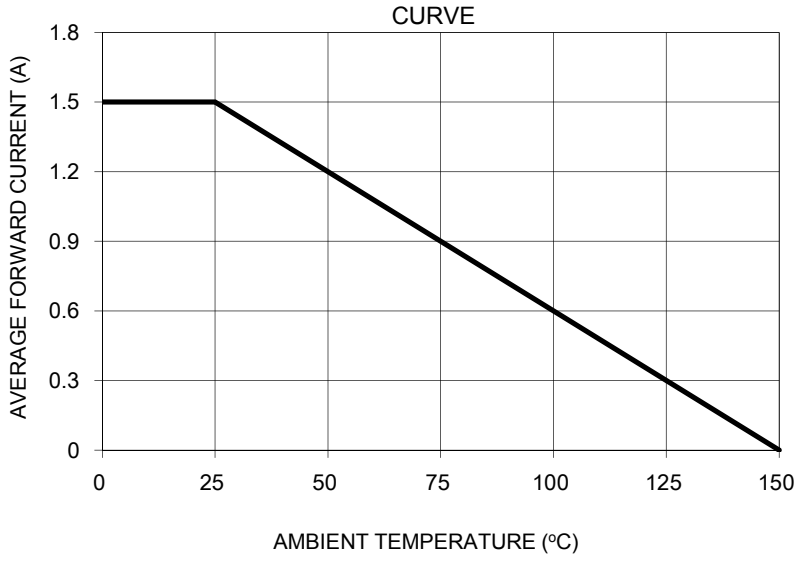


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

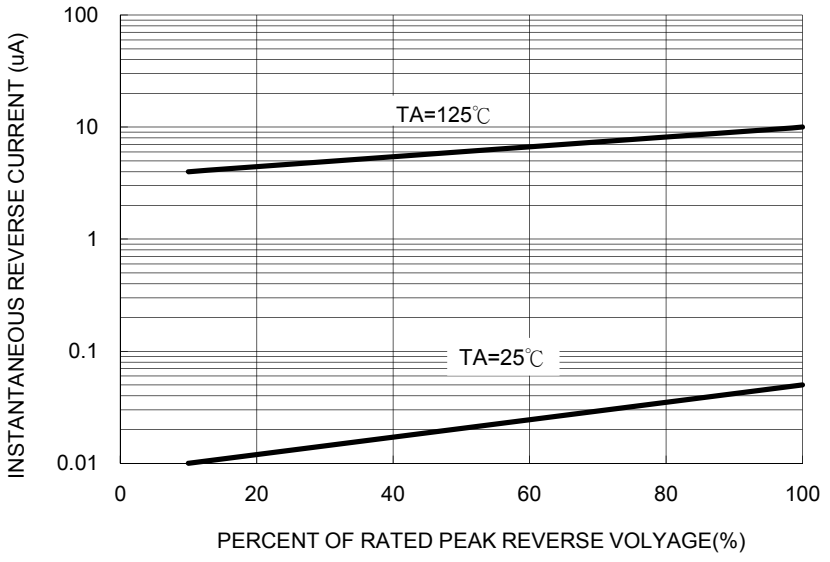


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

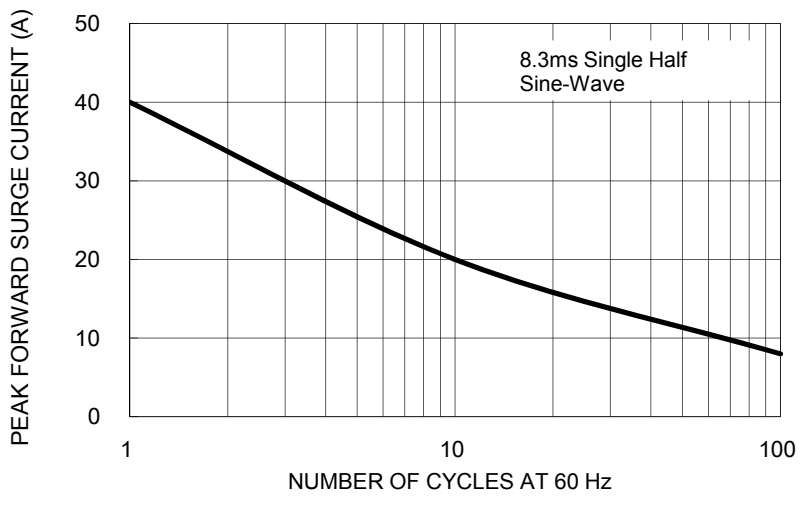


FIG. 4 TYPICAL JUNCTION CAPACITANCE

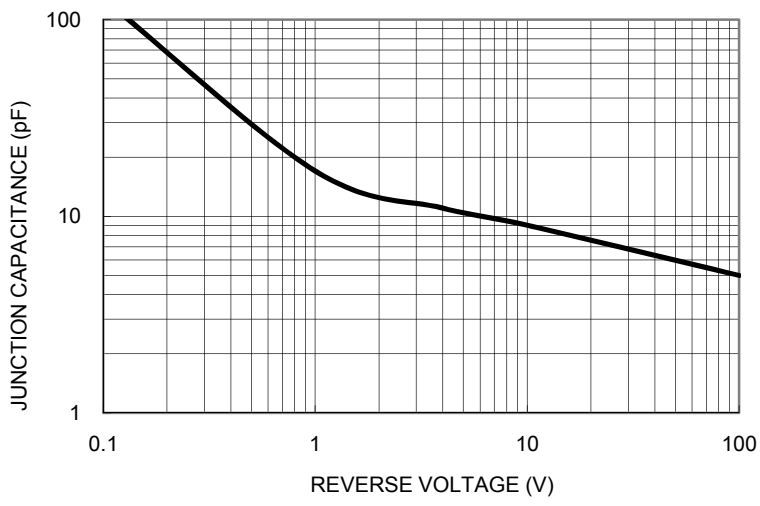
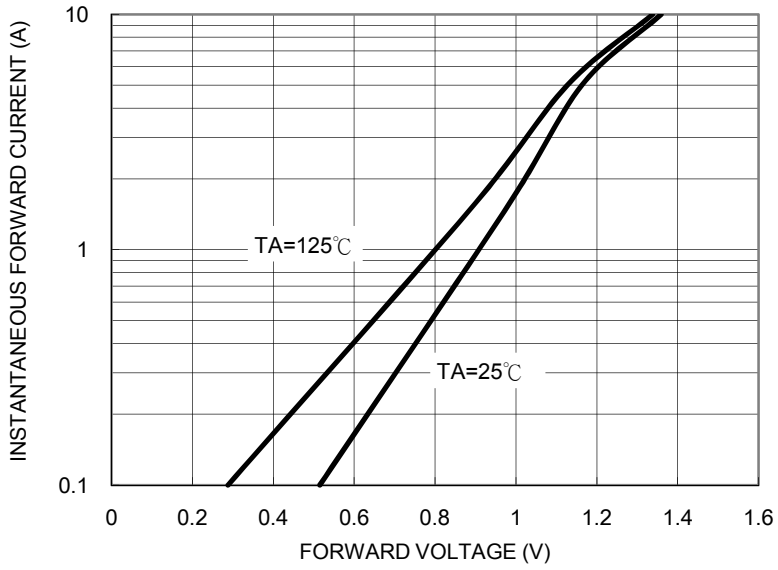
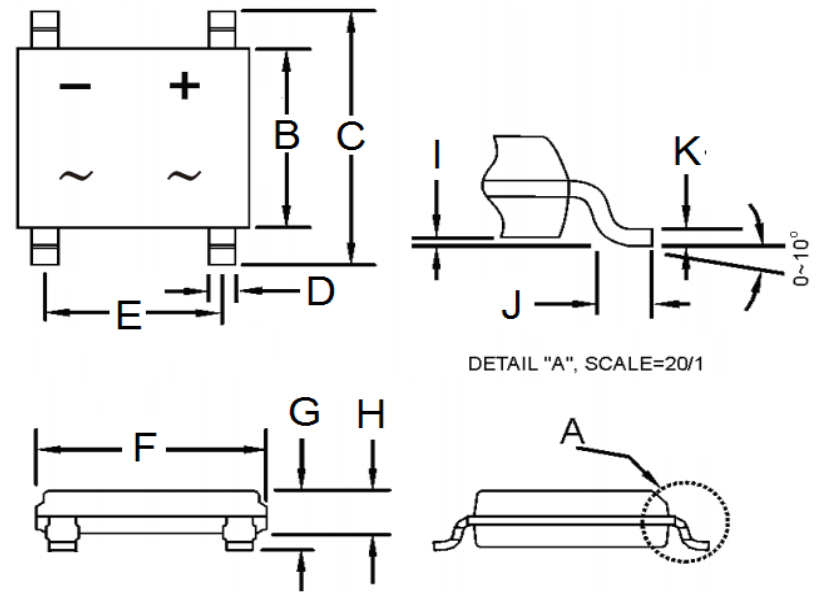


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

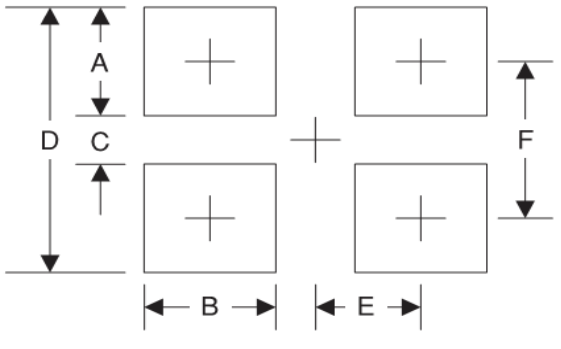


PACKAGE OUTLINE DIMENSIONS



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)
A	1.5
B	0.9
C	4.22
D	7.22
E	2.05
F	5.72

MARKING DIAGRAM

P/N = Specific Device Code
YW = Date Code
F = Factory Code