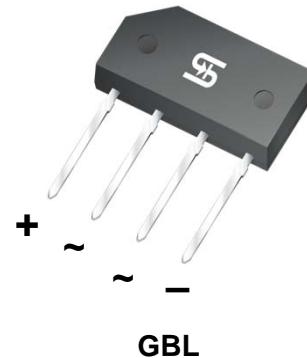


4A, 50V - 1000V Glass Passivated Single Phase Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength
- Typical IR less than $0.1\mu\text{A}$
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



MECHANICAL DATA

Case: GBL

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

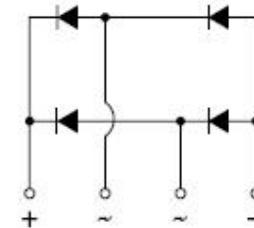
Packing code with suffix "G" means green compound (halogen-free)

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

Meet JESD 201 class 2 whisker test

Polarity: As marked

Weight: 2 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	GBL 005	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 10	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ $T_C=50^\circ\text{C}$ @ $T_A=40^\circ\text{C}$	$I_{F(AV)}$				4				A
					3				
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}				150				A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t				93				A^2s
Maximum instantaneous forward voltage (Note 1) @ 2 A @ 4 A	V_F				1.0				V
					1.1				
Maximum reverse current @ rated V_R $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	I_R			5					μA
				500					
Typical junction capacitance	C_J		95			40			pF
Typical thermal resistance	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$		8			13			$^\circ\text{C/W}$
			32						
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 μ s, 1% duty cycle

ORDERING INFORMATION

PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
GBLxx (Note 1)	H	C2	G	GBL	25 / Tube
		X0		GBL	25 / Tube / Forming
		D2		GBL	25 / Tube

Note 1: "xx" defines voltage from 50V (GBL005) to 1000V (GBL10)

*: Optional available

EXAMPLE

PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
GBL10HC2G	GBL10	H	C2	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

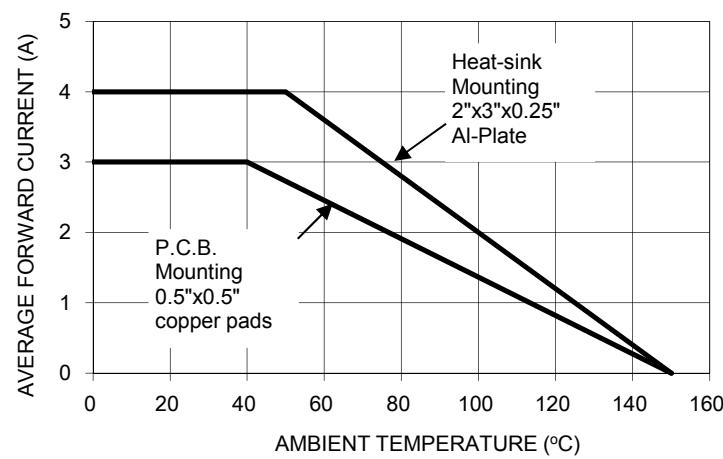
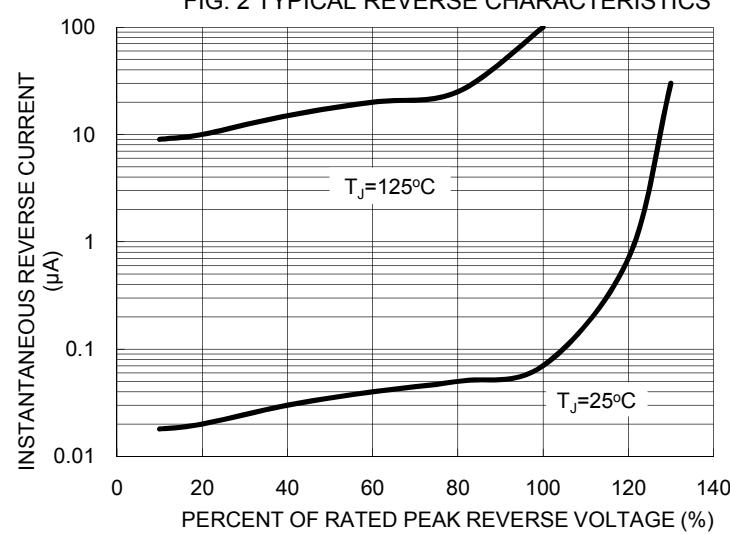
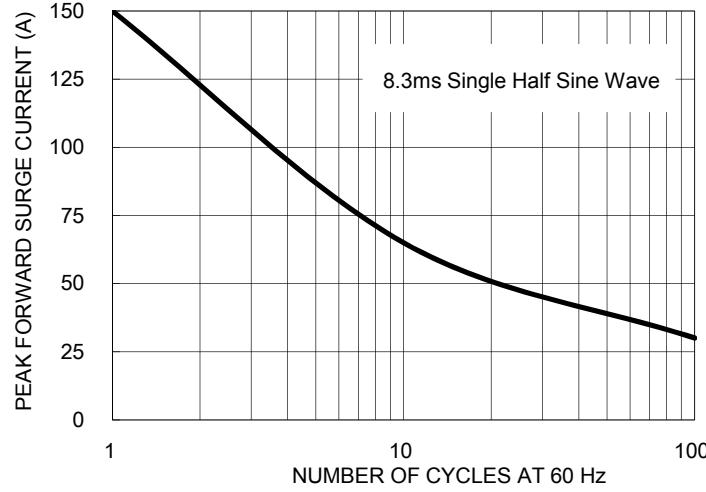
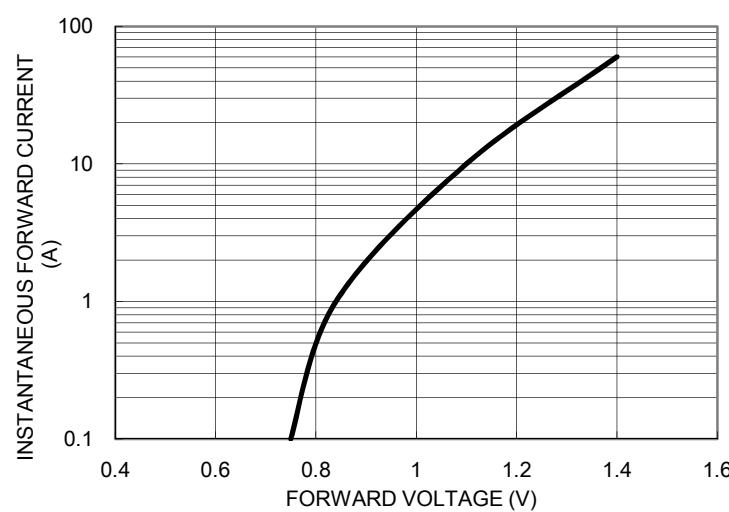
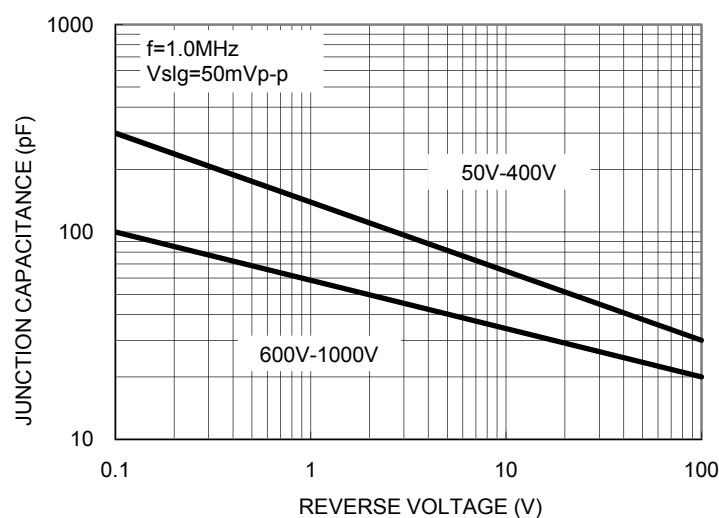
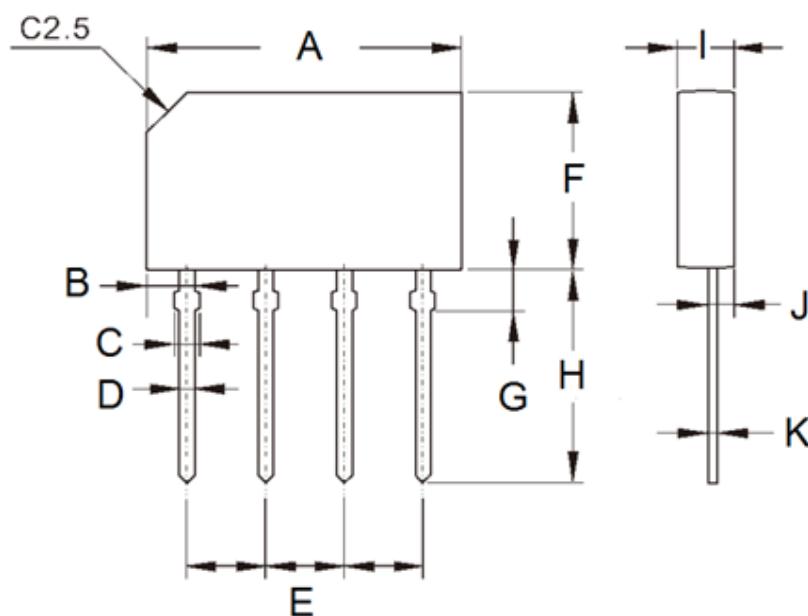
FIG.1 FORWARD CURRENT DERATING CURVE

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
GBL


DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	19.70	20.30	0.776	0.799
B	2.30	2.70	0.091	0.106
C	1.30	2.00	0.051	0.079
D	0.90	1.10	0.035	0.043
E	4.80	5.20	0.189	0.205
F	10.70	11.30	0.421	0.445
G	2.30	2.70	0.091	0.106
H	13.00	14.00	0.512	0.551
I	3.30	3.70	0.130	0.146
J	0.80	1.20	0.031	0.047
K	0.40	0.60	0.016	0.024

MARKING DIAGRAM


P/N = Specific Device Code
 G = Green Compound
 YWW = Date Code
 AC = Factory Code
 F = Factory Code

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