

## Glass Passivated Bridge Rectifiers

### FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength of 2000VRMS
- Reliable low cost construction
- 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 definition



TS4B



### MECHANICAL DATA

**Case:** TS4B

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

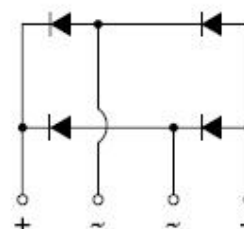
**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

**Polarity:** Polarity as marked on the body

**Mounting torque:** 5 in-lbs maximum

**Weight:** 4 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	TS6B 01G	TS6B 02G	TS6B 03G	TS6B 04G	TS6B 05G	TS6B 06G	TS6B 07G	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	6							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150							A
Rating for fusing (t<8.3ms)	I <sup>2</sup> t	93							A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) @ 3 A @ 6 A	V <sub>F</sub>	1.0 1.1							V
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	5 500							μA
Typical thermal resistance	R <sub>θJC</sub>	1.5							°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +150							°C
Storage temperature range	T <sub>STG</sub>	- 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
TS6B0xG (Note 1)	C2	Suffix "G"	TS4B	20 / TUBE
	X0		TS4B	Forming
	D2		TS4B	20 / TUBE

Note 1: "x" defines voltage from 50V (TS6B01G) to 1000V (TS6B07G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
TS6B01G C2	TS6B01G	C2		
TS6B01G C2G	TS6B01G	C2	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

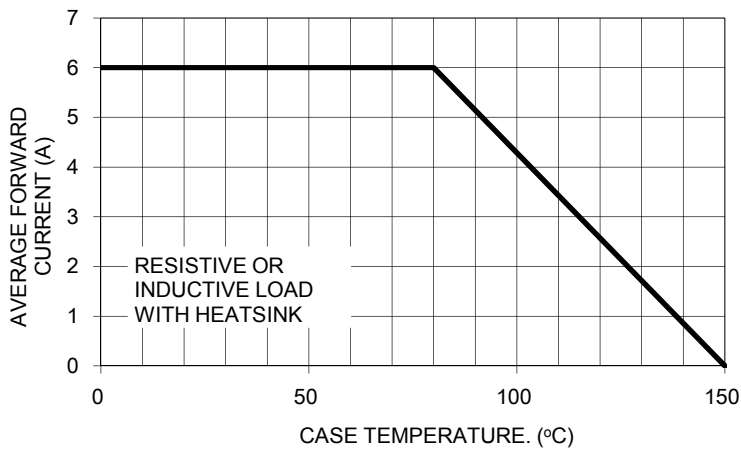


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

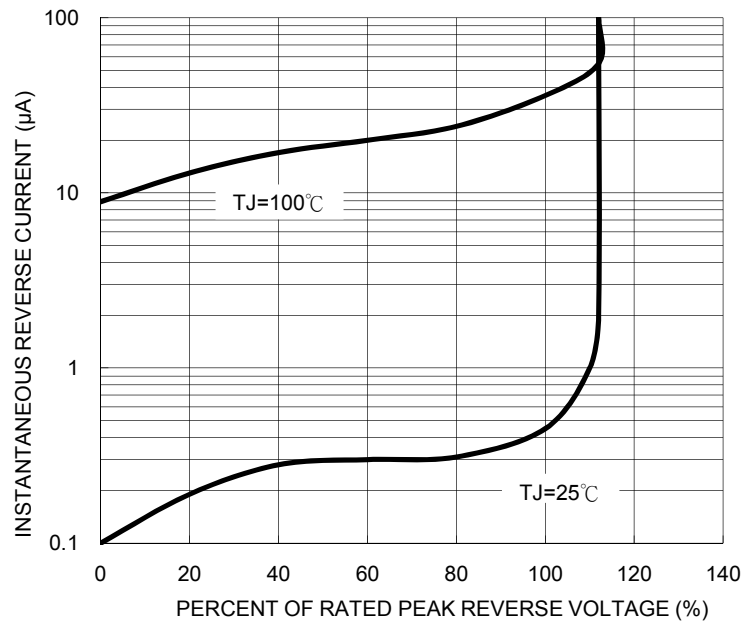


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

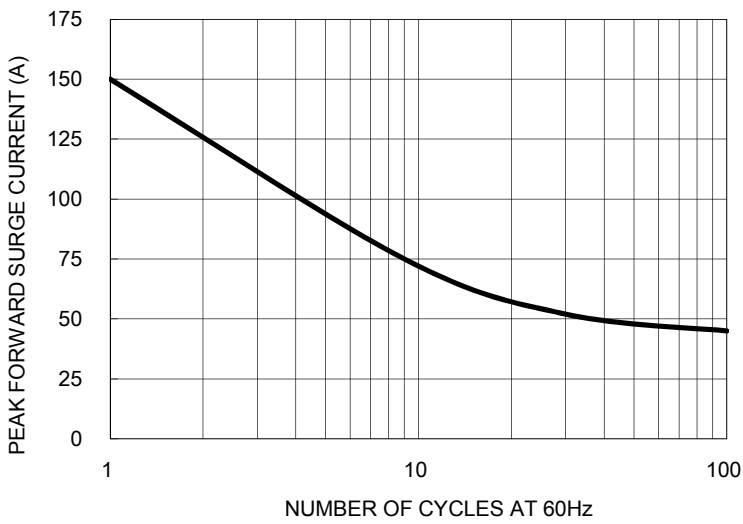


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

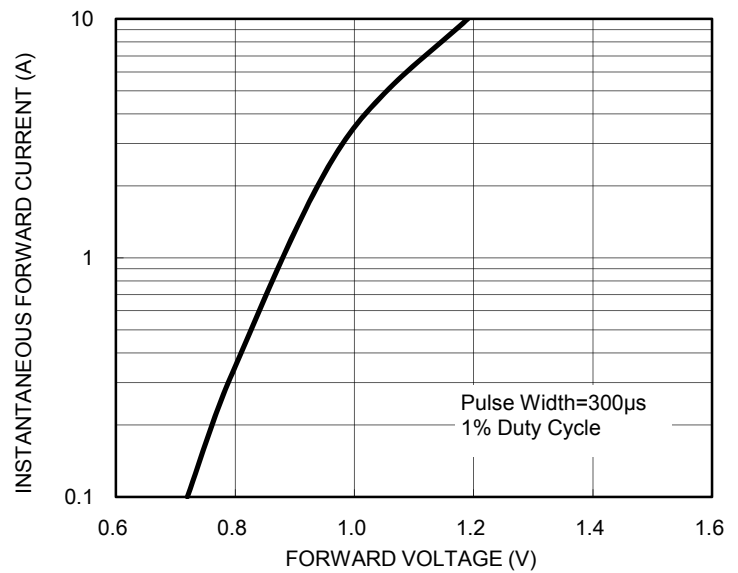
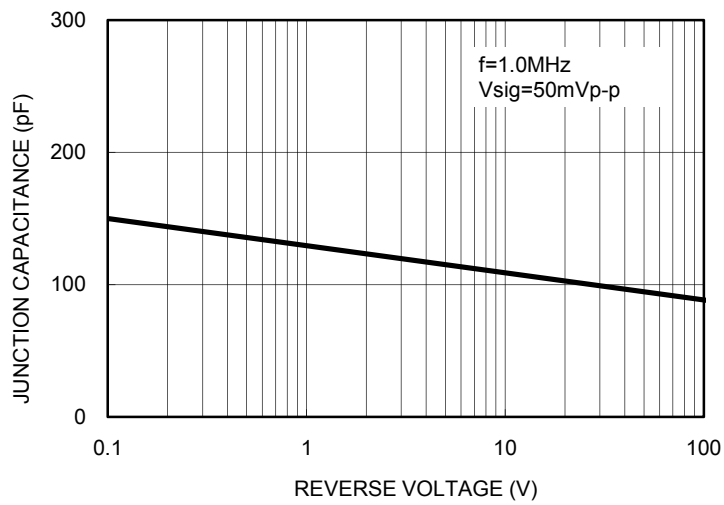
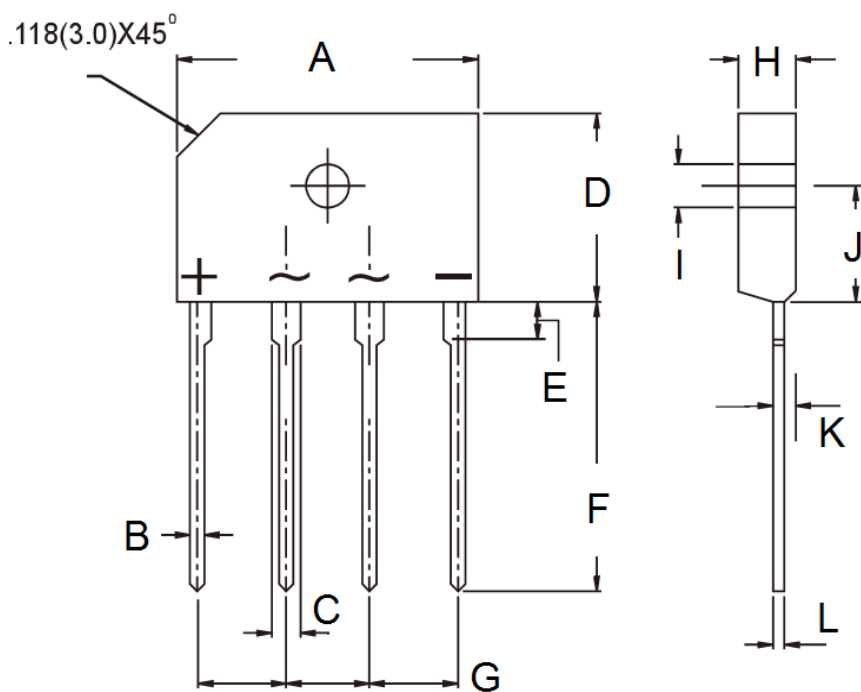


FIG. 5- TYPICAL JUNCTION CAPACITANCE

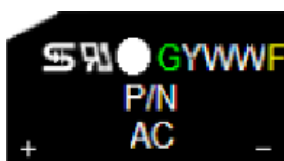


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	24.70	25.30	0.972	0.996
B	0.90	1.10	0.035	0.043
C	1.80	2.20	0.071	0.087
D	14.70	15.30	0.579	0.602
E	3.96	4.37	0.156	0.172
F	17.00	18.00	0.669	0.709
G	7.30	7.70	0.287	0.303
H	3.30	3.70	0.130	0.146
I	3.10	3.40	0.122	0.134
J	9.30	9.70	0.366	0.382
K	1.52	1.73	0.060	0.068
L	0.55	0.75	0.022	0.030

MARKING DIAGRAM



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

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