

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

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength of 2000V_{RMS}
- 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



MECHANICAL DATA

Case: TS4B

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)

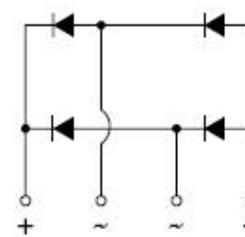
Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: Polarity as marked on the body

Mounting torque: 5 in-lbs maximum

Weight: 4 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TS4B 01G	TS4B 02G	TS4B 03G	TS4B 04G	TS4B 05G	TS4B 06G	TS4B 07G	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	I _{F(AV)}				4				A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}				120				A
Rating for fusing (t<8.3ms)	I ² t				60				A ² s
Maximum instantaneous forward voltage (Note 1) @ 2 A @ 4 A	V _F				1.0 1.1				V
Maximum reverse current @ rated V _R T _J =25°C T _J =125°C	I _R				5 500				µA
Typical thermal resistance	R _{θJC}				5.5				°C/W
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.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
TS4B0xG (Note 1)	H	C2	G	TS4B	20 / Tube
		X0		TS4B	Forming
		D2		TS4B	20 / Tube

Note 1: "x" defines voltage from 50V (TS4B01G) to 1000V (TS4B07G)

*: Optional available

EXAMPLE

PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TS4B01GHC2G	TS4B01G	H	C2	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

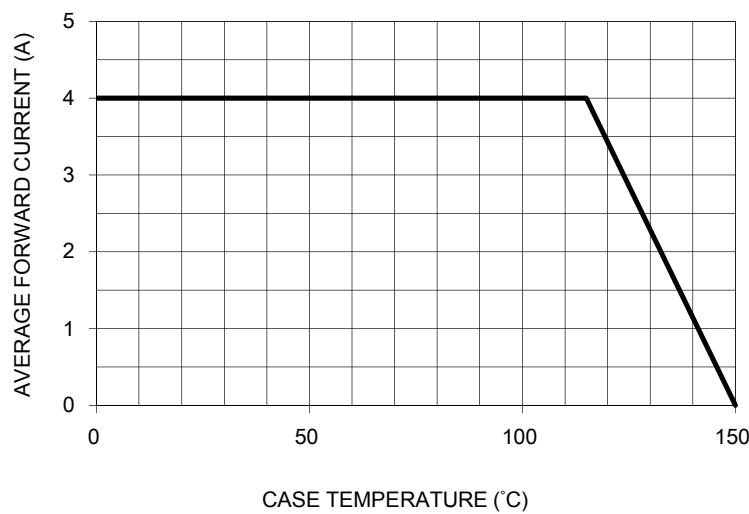
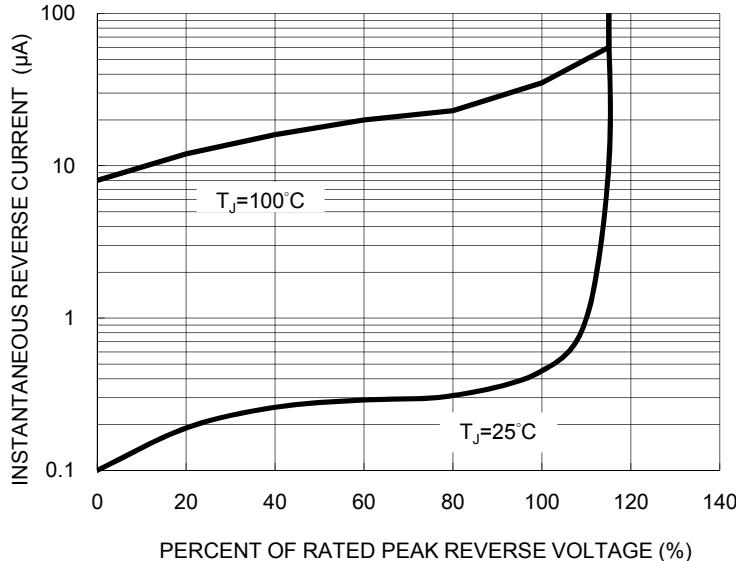
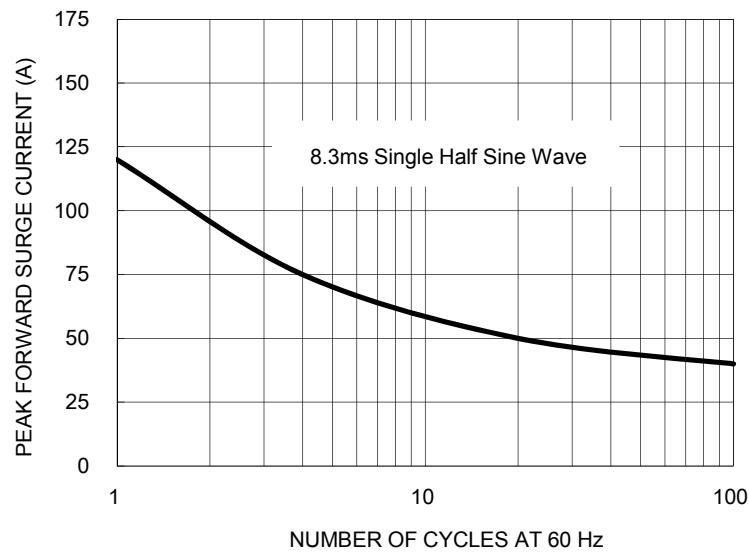
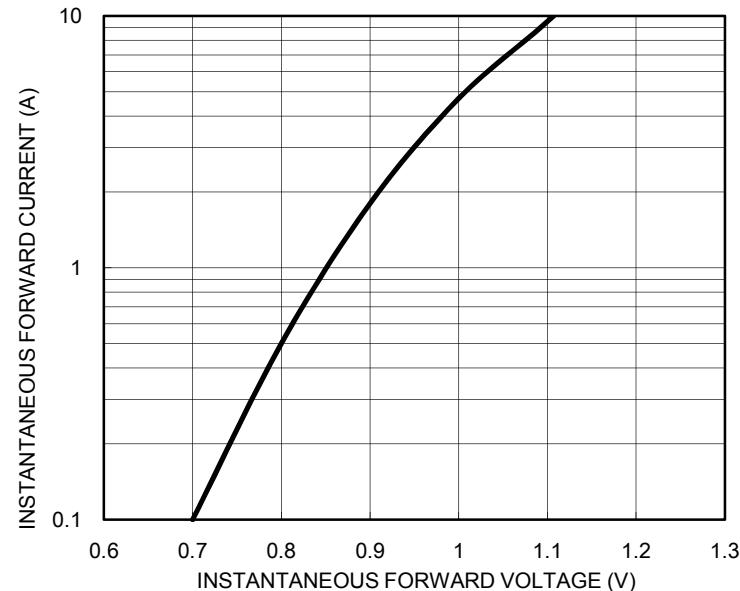
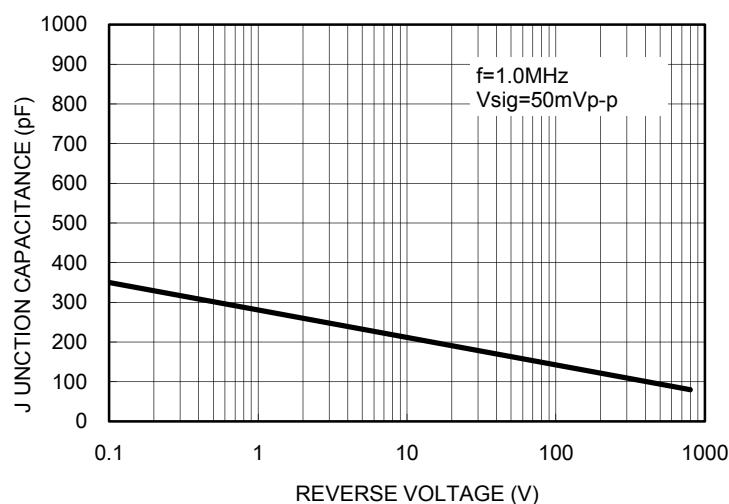
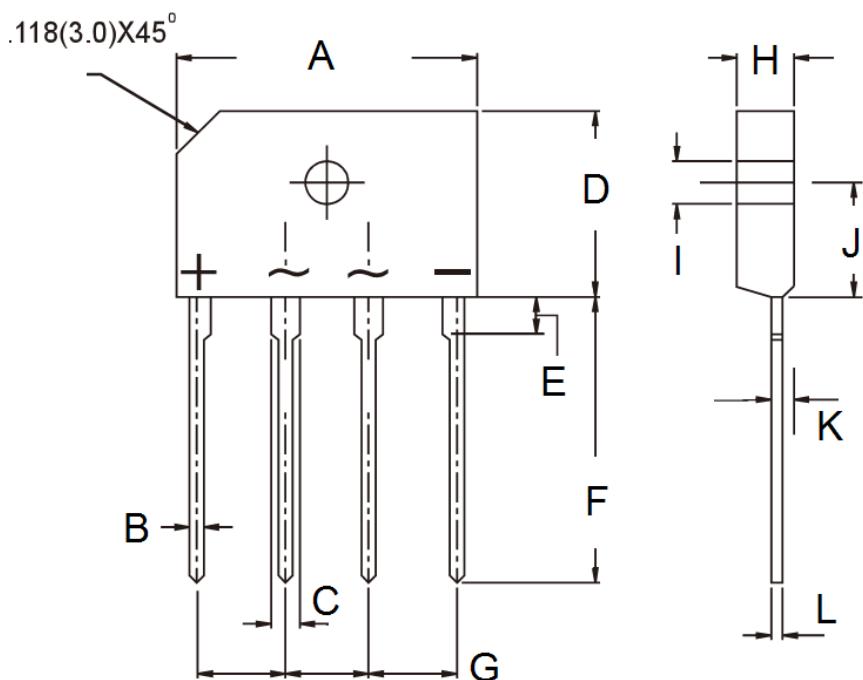
**FIG.1 MAXIMUM FORWARD CURRENT
DERATING CURVE**

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

TS4B



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

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 or 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Taiwan Semiconductor:

[TS4B01G](#) [TS4B02G](#) [TS4B03G](#) [TS4B04G](#) [TS4B05G](#) [TS4B06G](#) [TS4B07G](#) [TS4B02G D2](#) [TS4B03G D2](#)
[TS4B06GHD2](#) [TS4B03GHD2](#) [TS4B04G D2](#) [TS4B05GHD2](#) [TS4B02GHD2](#) [TS4B07G D2](#) [TS4B04GHD2](#)
[TS4B07GHD2](#) [TS4B01GHD2](#) [TS4B01G D2](#)