

# **Glass Passivated Bridge Rectifiers**

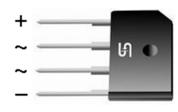
#### **FEATURES**

- 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

## **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)



TS4B





	SYMBOL V <sub>RRM</sub>	<b>TSS4B</b> 01G 50	<b>TSS4B</b> 02G 100	TSS4B 03G 200	<b>TSS4B</b> 04G 400	UNIT V
PARAMETER						
Maximum repetitive peak reverse voltage						
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	4				Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150				А
Rating for fusing (t<8.3ms)	l <sup>2</sup> t	93			A <sup>2</sup> s	
Maximum instantaneous forward voltage (Note 1) @ 4 A	V <sub>F</sub>	0.98 1.3		1.3	V	
Maximum DC reverse current $T_J=25 \degree$ Cat rated DC blocking voltage $T_J=125\degree$ C	I <sub>R</sub>	5 500			μA	
Maximum reverse recovery time(Note 2)	Trr	35 50		50	ns	
Typical thermal resistance	$R_{ extsf{ heta}JC}$	5.5			<sup>o</sup> C/W	
Operating junction temperature range	TJ	- 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

Note 2: Reverse Recovery Test Conditions:  $I_F$ =0.5A,  $I_R$ =1.0A,  $I_{RR}$ =0.25A.



# TSS4B01G thru TSS4B04G

Taiwan Semiconductor

ORDERING INFORMATION

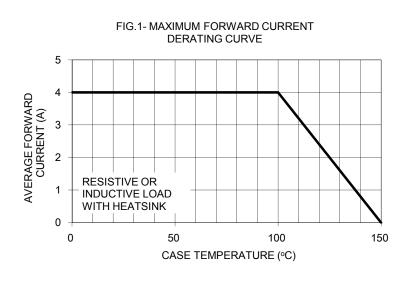
ORDERING INFORMATION					
PART NO.	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	
		CODE			
TSS4B0xG (Note 1)	C2	Suffix "G"	TS4B	20 / Tube	
	X0		TS4B	Forming	
	D2		TS4B	20 / Tube	

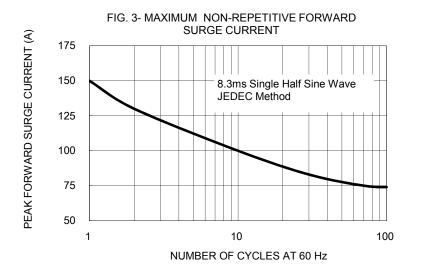
Note 1: "x" defines voltage from 50V (TSS4B01G) to 400V (TSS4B04G)

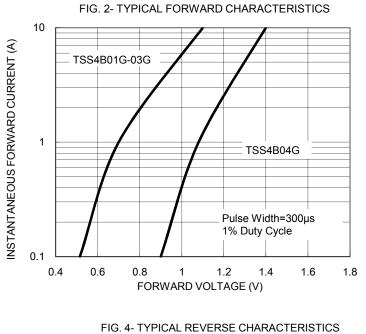
EXAMPLE							
PREFERRED P/N PART NO		PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION			
TSS4B01G C2	TSS4B01G	C2					
TSS4B01G C2G	TSS4B01G	C2	G	Green compound			

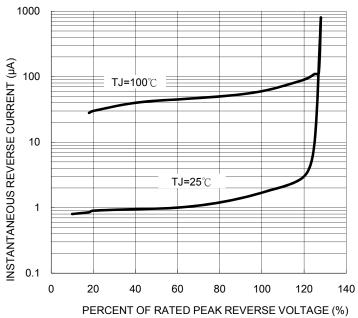
# **RATINGS AND CHARACTERISTICS CURVES**

(TA=25 $^{\circ}$ C unless otherwise noted)









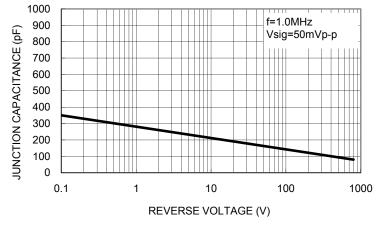


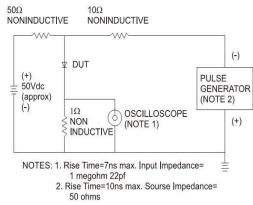
# Taiwan Semiconductor

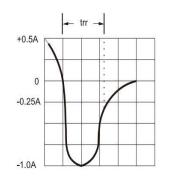
FIG. 5- TYPICAL JUNCTION CAPACITANCE

FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

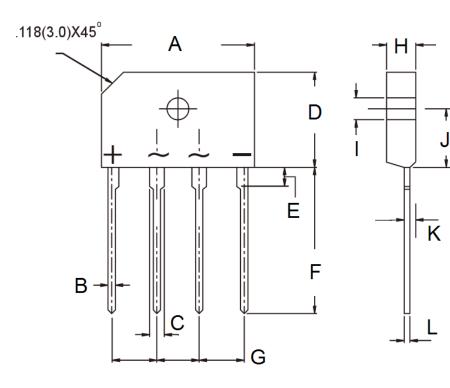
# 50Ω NONINDUCTIVE







# PACKAGE OUTLINE DIMENSIONS



DIM.	Unit	(mm <b>)</b>	Unit(inch)		
DIN.	Min	Max	Min	Max	
А	24.70	25.30	0.972	0.996	
В	0.90	1.10	0.035	0.043	
С	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	
Н	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	
К	1.52	1.73	0.060	0.068	
L	0.55	0.75	0.022	0.030	

### **MARKING DIAGRAM**



### P/N G

F

YWW

= Green Compound

= Specific Device Code

- = Date Code
- = Factory Code



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