

# 15A, 50V - 1000V Glass Passivated Bridge Rectifiers

### **FEATURES**

- Glass passivated junction
- Ideal for printed circuit board
- Typical  $I_{\text{R}}$  less than  $0.1 \mu \text{A}$
- High surge current capability
- 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



Case: TS-6P

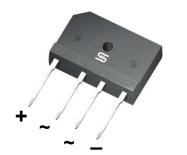
Molding compound, UL flammability classification rating 94V-0

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

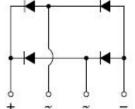
Meet JESD 201 class 2 whisker test Polarity: Polarity as marked on the body Mounting torque: 8.17 in-lbs maximum

Weight: 7.15 g (approximately)









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	1000	
	-	+

TS-6P

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	TS15P	TS15P	TS15P	TS15P	TS15P	TS15P	TS15P	UNIT
PARAIVIETER	STIVIBUL	01G	02G	03G	04G	05G	06G	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 <sub>F(AV)</sub>	15				Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	240				Α			
Rating for fusing (t<8.3ms)	I <sup>2</sup> t				239				A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) @ 7.5 A @ 15 A	V <sub>F</sub>	1.0 1.1					V		
Maximum reverse current @ rated $V_R$ $T_J$ =25°C $T_J$ =125°C	I <sub>R</sub>	10 500				μΑ			
Typical thermal resistance	$R_{ heta JC}$				0.8				°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +150						°C	
Storage temperature range	T <sub>STG</sub>			-	55 to +15	50			°C

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



ORDERING INFORMATION							
PART NO.	PART NO.	PACKING	PACKING CODE	PACKAGE	PACKING		
	SUFFIX	CODE	SUFFIX (*)	PACKAGE	PACKING		
TS15P0xG (Note 1)	н	C2		TS-6P	15 / TUBE		
		X0	G	TS-6P	Forming		
		D2		TS-6P	15 / TUBE (Auto)		

Note 1: "x" defines voltage from 50V (TS15P01G) to 1000V (TS15P07G)

<sup>\*:</sup> Optional available

EXAMPLE							
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION		
TS15P07GHC2G	TS15P07G	Н	C2	G	AEC-Q101 qualified Green compound		

### RATINGS AND CHARACTERISTICS CURVES

(T<sub>A</sub>=25°C unless otherwise noted)

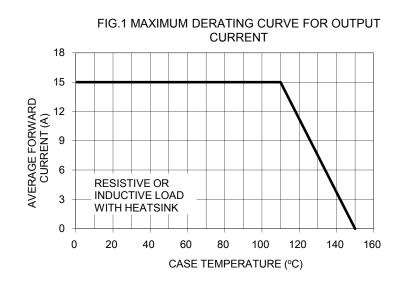


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

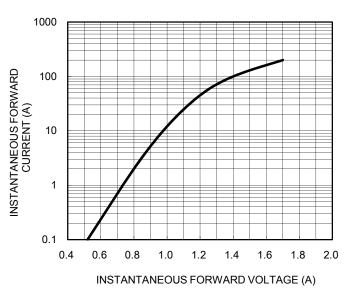


FIG. 3 MAXIMUM SURGE CURRENT

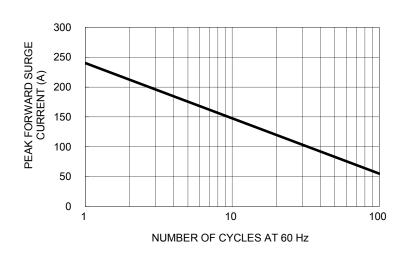


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

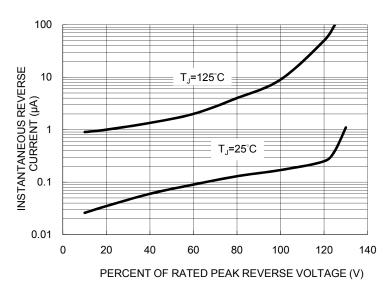
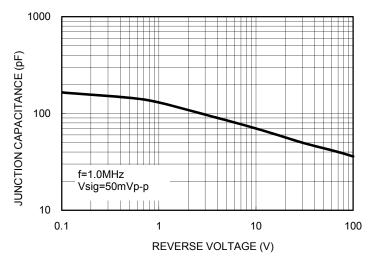


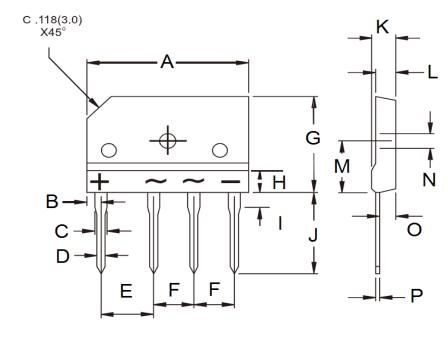


FIG. 5 TYPICAL JUNCTION CAPACITANCE



## PACKAGE OUTLINE DIMENSIONS

TS-6P



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	29.70	30.30	1.169	1.193	
В	2.30	2.70	0.091	0.106	
С	2.00	2.40	0.079	0.094	
D	0.90	1.10	0.035	0.043	
Е	9.80	10.20	0.386	0.402	
F	7.30	7.70	0.287	0.303	
G	19.70	20.30	0.776	0.799	
Н	ı	4.80	ı	0.189	
I	3.80	4.20	0.150	0.165	
J	17.00	18.00	0.669	0.709	
K	4.40	4.80	0.173	0.189	
L	3.40	3.80	0.134	0.150	
М	10.80	11.20	0.425	0.441	
N	3.10	3.40	0.122	0.134	
0	2.50	2.90	0.098	0.114	
Р	0.65	0.75	0.026	0.030	

### MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

Document Number: DS\_D1411003





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Document Number: DS\_D1411003 Version: L15