



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

#### **FEATURES**

- Glass passivated junction
- Ideal for printed circuit board
- Typical  $I_R$  less than  $0.1\mu A$
- 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







### **MECHANICAL DATA**

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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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
PARAMETER		01G	02G	03G	04G	05G	06G	07G	
Maximum repetitive peak reverse voltage	$V_{RRM}$	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>				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)	l <sup>2</sup> t				239				$A^2s$
Maximum instantaneous forward voltage (Note 1) @ 7.5 A @ 15 A	V <sub>F</sub>				1.0 1.1				V
Maximum reverse current @ rated $V_R$ $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I <sub>R</sub>	10 500			μΑ				
Typical thermal resistance	R <sub>eJC</sub>				0.8				°C/W
Operating junction temperature range	TJ			-	55 to +15	50		_	°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150					°C		
Niete de Deiles testacitle DW 2000s at 40% determine	•	•						-	

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



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

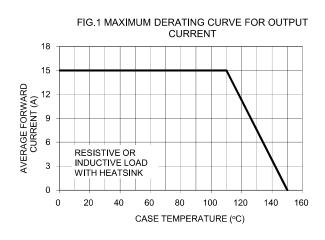
Note 1: "x" defines voltage from 50V (TS15P01G) to 1000V (TS15P07G)

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

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

## **RATINGS AND CHARACTERISTICS CURVES**

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



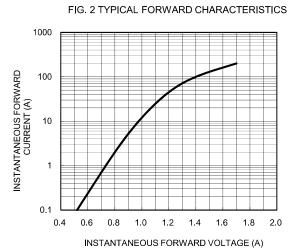


FIG. 3 MAXIMUM SURGE CURRENT

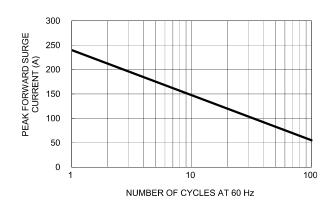
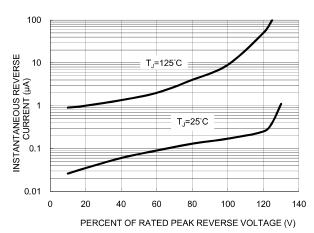
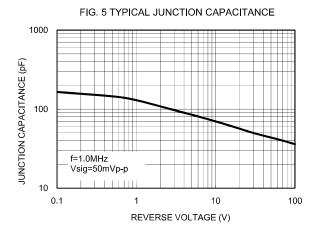


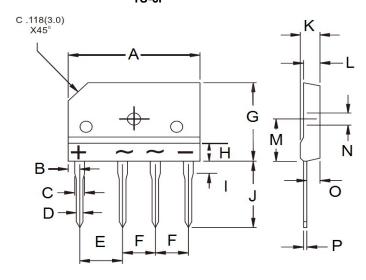
FIG. 4 TYPICAL REVERSE CHARACTERISTICS







# 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	-	4.80	-	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	
Ν	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





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