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## 25A, 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







#### **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	TS25P	TS25P	TS25P	TS25P	TS25P	TS25P	TS25P	UNIT
PANAMETEN		01G	02G	03G	04G	05G	06G	07G	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	٧
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	٧
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>		-	-	25	<del>-</del>	-	-	Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>				350				Α
Rating for fusing (t<8.3ms)	l <sup>2</sup> t				508				A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) @ 12.5 A @ 25 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	$R_{ heta JC}$				0.6				°C/W
Operating junction temperature range	T <sub>J</sub>			-	55 to +15	50			°C
Storage temperature range	T <sub>STG</sub>			-	55 to +15	50			°C

Note 1: Pulse test with PW=300 $\mu$ s, 1% duty cycle



ORDERING INFORMATION						
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX <sup>(*)</sup>	PACKAGE	PACKING	
TOOFDO		C2		TS-6P	15 / TUBE	
TS25P0xG (Note 1)	Н	X0	G	TS-6P	Forming	
		D2		TS-6P	15 / TUBE	

Note 1: "x" defines voltage from 50V (TS25P01G) to 1000V (TS25P07G)

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

EXAMPLE					
EXAMPLE PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TS25P07GHC2G	TS25P07G	П	C2	G	AEC-Q101 qualified Green compound

#### **RATINGS AND CHARACTERISTICS CURVES**

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

FIG.1 FORWARD CURRENT DERATING CURVE

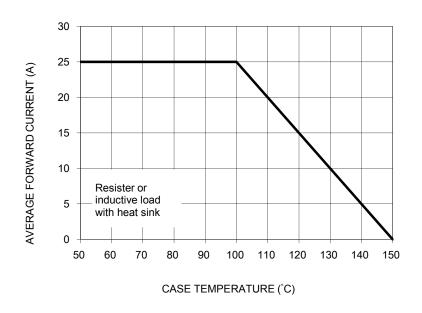


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

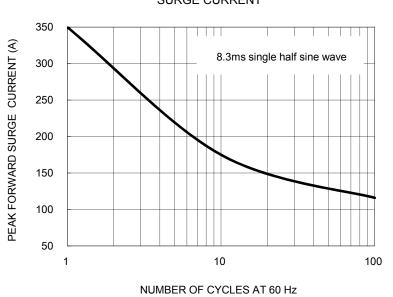


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

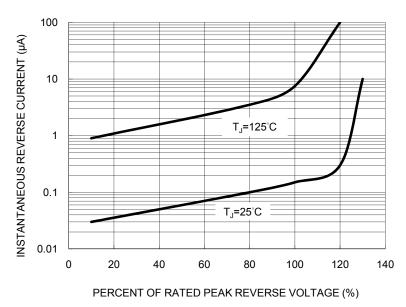
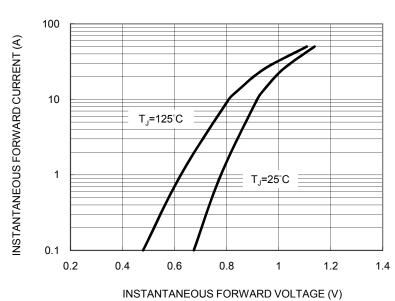


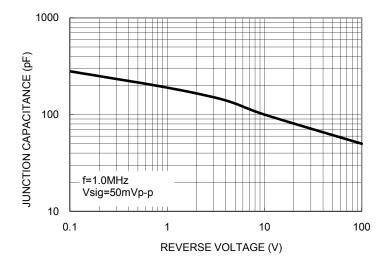
FIG. 4 TYPICAL FORWARD CHARACTERISTICS



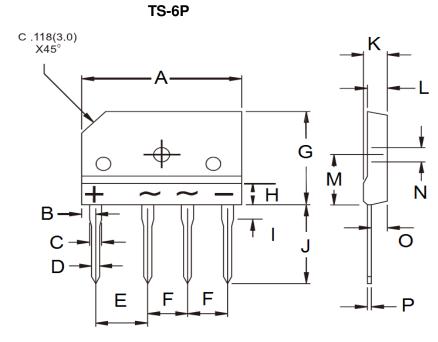
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FIG. 5 TYPICAL JUNCTION CAPACITANCE



# PACKAGE OUTLINE DIMENSIONS



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	
E	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	
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

= Factory Code





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