

10A, 50V - 1000V Glass Passivated Bridge Rectifiers

FEATURES

- Glass passivated junction
- Ideal for printed circuit board
- Typical I_{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

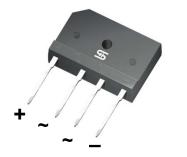
Part no. with suffix "H" means AEC-Q101 qualified

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

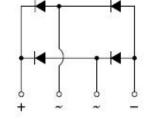
Weight: 7.15 g (approximately)











MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	TS10P	TS10P	TS10P	TS10P	TS10P	TS10P	TS10P	UNIT
PARAIVIETER		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_{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	$I_{F(AV)}$	10				Α			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	200					А		
Rating for fusing (t<8.3ms)	I ² t				166				A ² s
Maximum instantaneous forward voltage (Note 1) @ 5 A @ 10 A	V _F	1.0 1.1				V			
Maximum reverse current @ rated V_R $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I _R	10 500				μΑ			
Typical thermal resistance	$R_{ heta JC}$		•	•	1.4	•	•		°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.	PACKING	PACKING CODE	DACKACE	PACKING		
	SUFFIX	CODE	SUFFIX (*)	PACKAGE	PACKING		
TS10P0xG (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 (TS10P01G) to 1000V (TS10P07G)

^{*:} Optional available

EXAMPLE						
PREFERRED		PART NO.	PACKING CODE	PACKING CODE	DESCRIPTION	
PART NO.	PART NO.	SUFFIX	PACKING CODE	SUFFIX		
TS10P07GHC2G	TS10P07G	Н	C2	G	AEC-Q101 qualified Green compound	

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

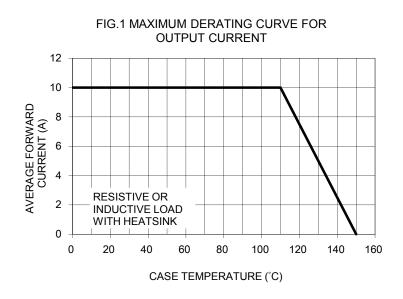


FIG. 2 MAXIMUM FORWARD SURGE CURRENT

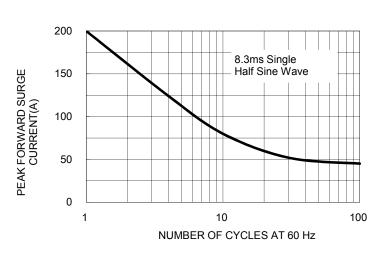


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

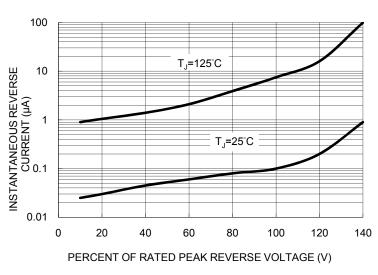


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

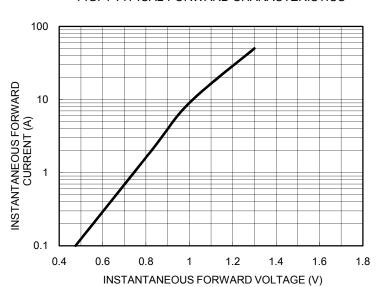
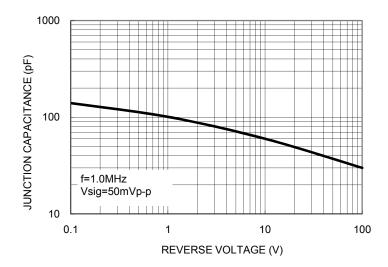


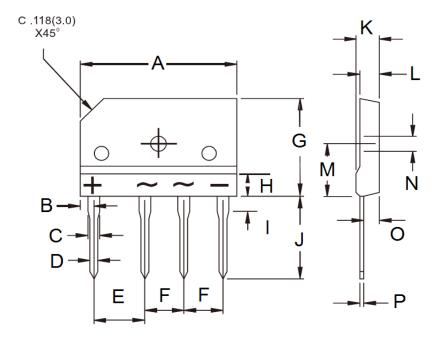


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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		
C	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	1	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		
Ш	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





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<u>TS10P01G TS10P02G TS10P03G TS10P04G TS10P05G TS10P06G TS10P07G TS10P04GHD2 TS10P04G</u>

<u>D2 TS10P01GHD2 TS10P05G D2 TS10P07GHD2 TS10P02GHD2 TS10P06GHD2 TS10P05GHD2 TS10P01G D2</u>

TS10P03G D2 TS10P03GHD2 TS10P06G D2 TS10P07G D2 TS10P02G D2