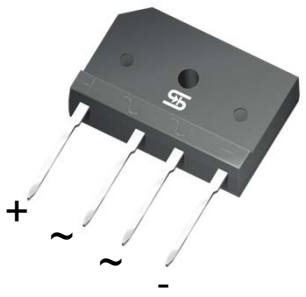
25A, 600V
Low VF- Low Noise Single-Phase Single In-Line Bridge Rectifier

FEATURES

- Low Forward drop enhance the efficiency
- Oxide Planar chip junction
- 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 definition



TS-6P

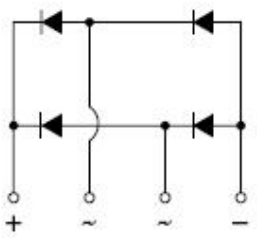
Pb-Free

RoHS COMPLIANT

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification.
Especially for high efficiency desktop, telecom, server,
white goods, home appliances, TV game console SMPS.

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 1A whisker test
Polarity: Polarity as marked on the body
Mounting torque: Maximum 0.8Nm; 0.5Nm is recommended
Weight: 7.15g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)				
PARAMETER	SYMBOL	TS25PL05G		UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600		V
Maximum RMS voltage	V_{RMS}	420		V
Maximum DC blocking voltage	V_{DC}	600		V
Maximum average forward rectified current	$I_{F(AV)}$	25		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	300		A
Rating for fusing (t<8.3ms)	I^2t	373		A^2s
Peak forward surge current, 1 ms single half sine-wave superimposed on rated load	I_{FSM}	900		A
Instantaneous forward voltage (Note 1) I_F= 12.5A	V_F	TYP	MAX	
T_J=25 °C		0.87	0.92	V
T_J=125 °C		0.75	-	
Maximum DC reverse current at rated DC blocking voltage T_J=25 °C	I_R	10		µA
T_J=125 °C		150		
Typical thermal resistance	$R_{\theta JC}$	2		°C/W
	$R_{\theta JA}$	5.5		
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. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TS25PL05G	H	D2	G	TS-6P	15 / TUBE
		X0		TS-6P	Forming

EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TS25PL05GHD2G	TS25PL05G	H	D2	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

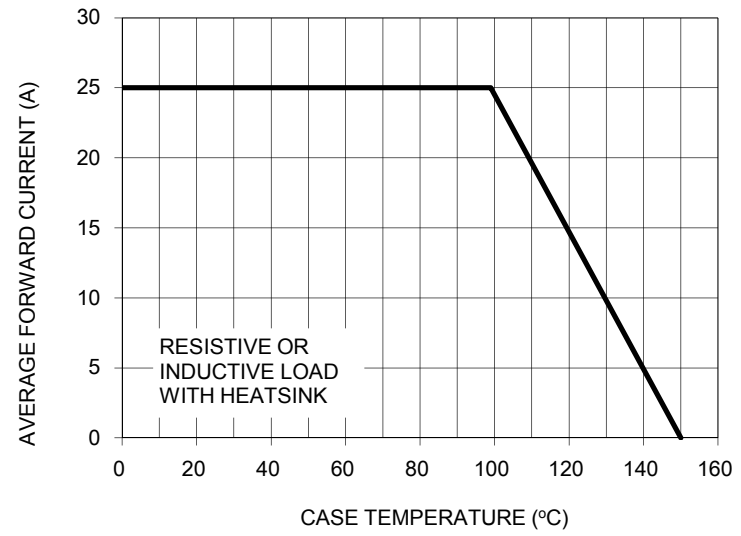


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

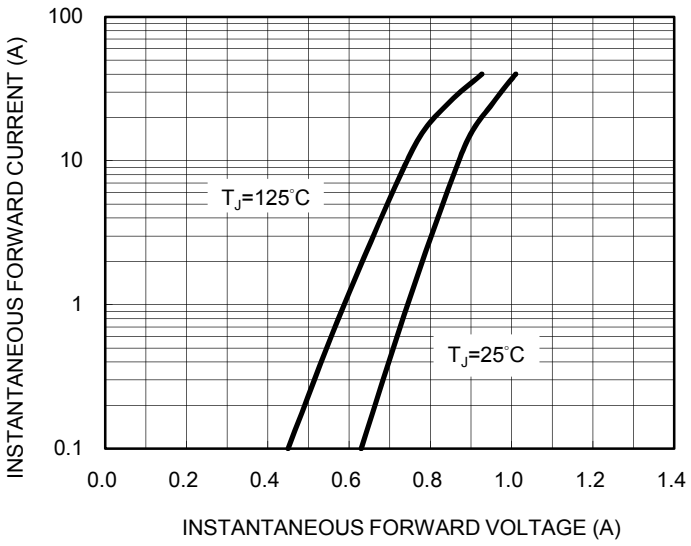


FIG. 3 MAXIMUM SURGE CURRENT

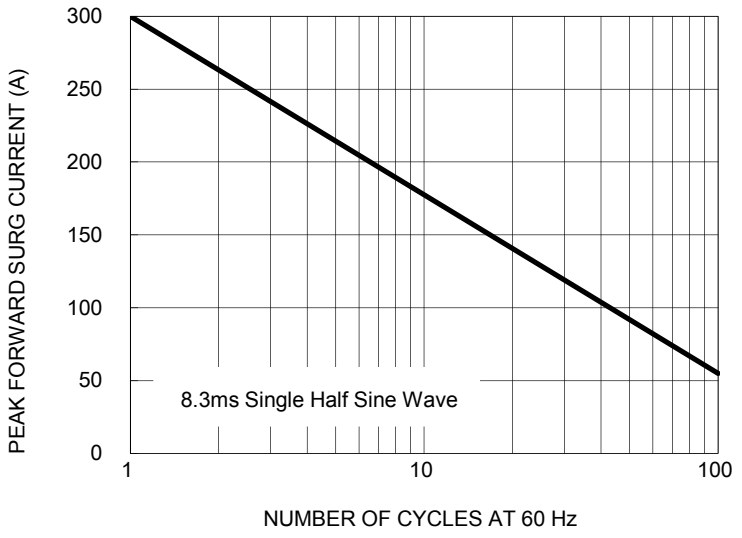


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

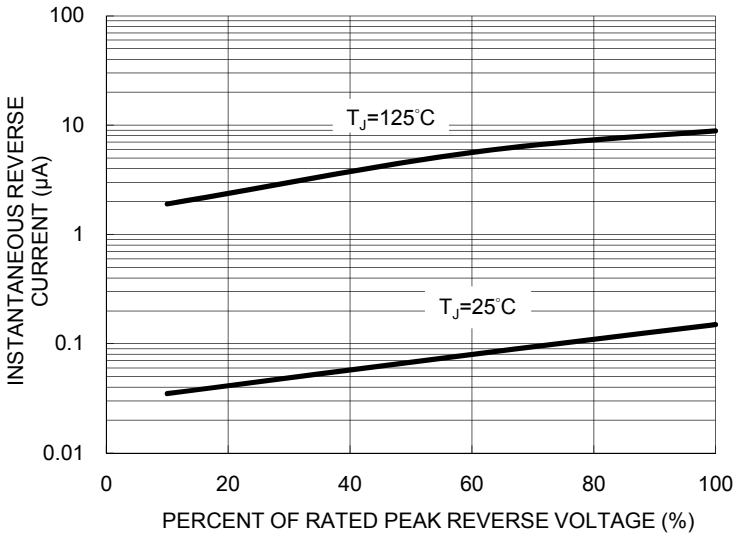
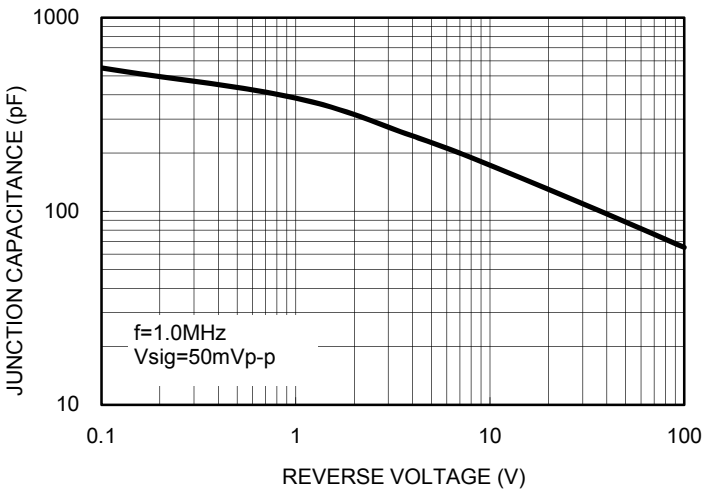
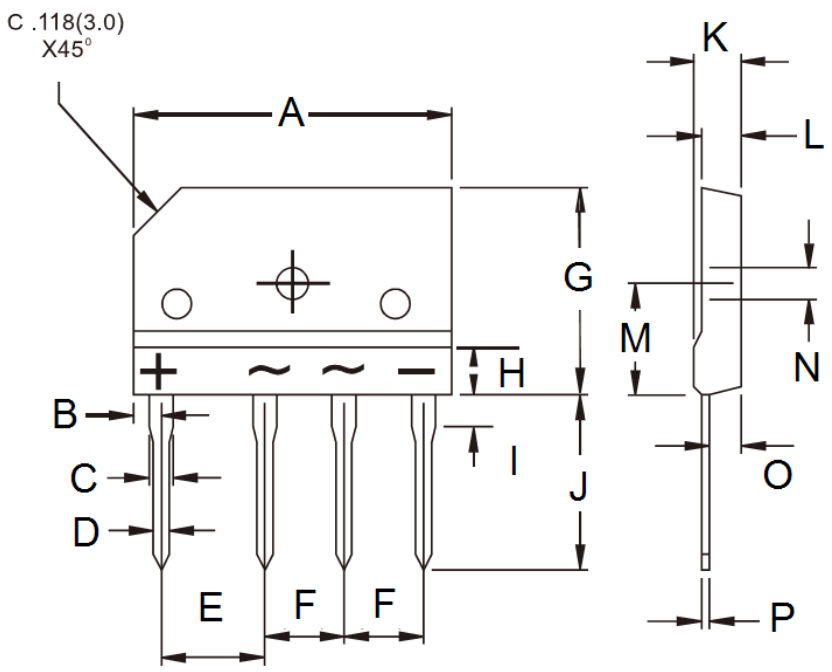


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

TS-6P



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	29.70	30.30	1.169	1.193
B	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
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
H	-	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
M	10.80	11.20	0.425	0.441
N	3.10	3.40	0.122	0.134
O	2.50	2.90	0.098	0.114
P	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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