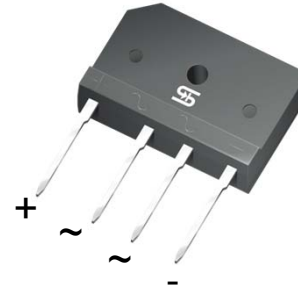


## 15A, 600V - 800V Low VF- Low Noise Single-Phase Single In-Line Bridge Rectifier

### 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

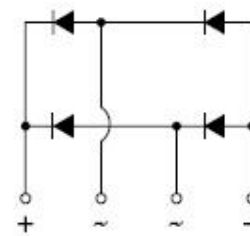


**TS-6P**



### 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 2 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 <sub>A</sub> =25°C unless otherwise noted)				
PARAMETER	SYMBOL	TS15PL05G	TS15PL06G	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	600	800	V
Maximum RMS voltage	V <sub>RMS</sub>	420	560	V
Maximum DC blocking voltage	V <sub>DC</sub>	600	800	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	15		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200		A
Rating for fusing (t<8.3ms)	i <sup>2</sup> t	166		A <sup>2</sup> s
Peak forward surge current, 1 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	630		A
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 7.5A	V <sub>F</sub>	0.90	0.93	V
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	5 150		μA
Typical thermal resistance	R <sub>θJC</sub>	2		°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +150		°C
Storage temperature range	T <sub>STG</sub>	- 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
TS15PL0xG (Note 1)	H	C2	G	TS-6P	15 / TUBE
		X0		TS-6P	Forming
		D2		TS-6P	15 / TUBE (Auto)

Note 1: "x" defines voltage from 600V (TS15pl05G) to 800V (TS15PL06G)

\*: Optional available

EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TS15PL05GHC2G	TS15PL05G	H	C2	G	AEC-Q101 qualified Green compound

**RATINGS AND CHARACTERISTICS CURVES**

( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

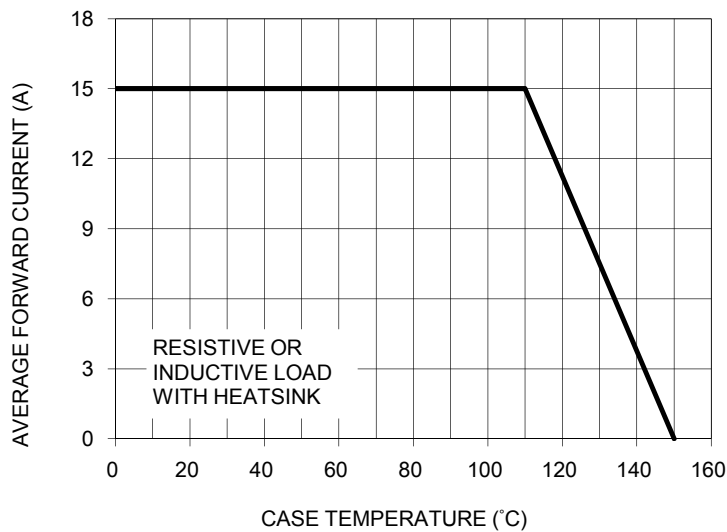


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

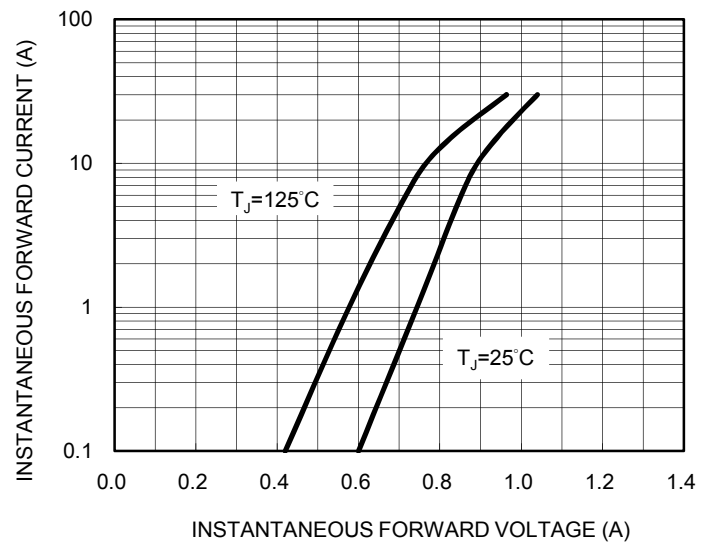


FIG. 3 MAXIMUM SURGE CURRENT

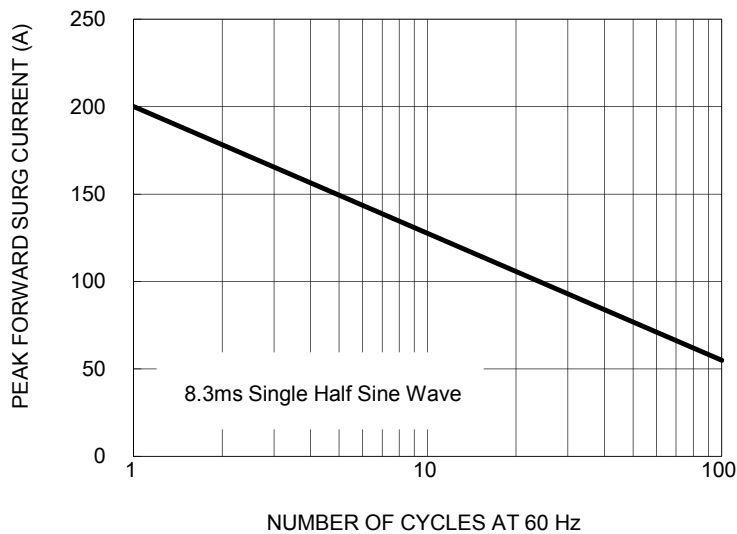


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

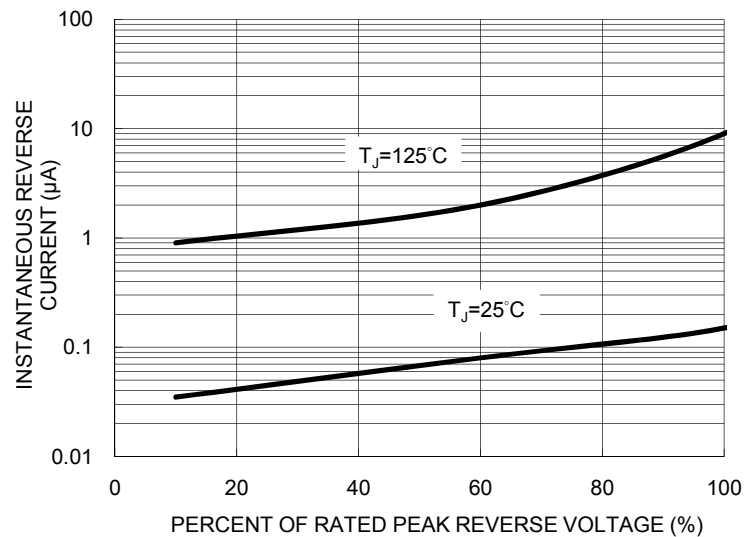
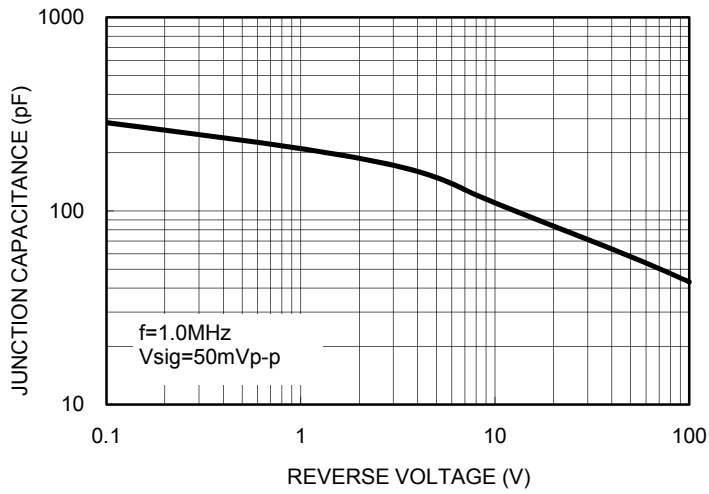
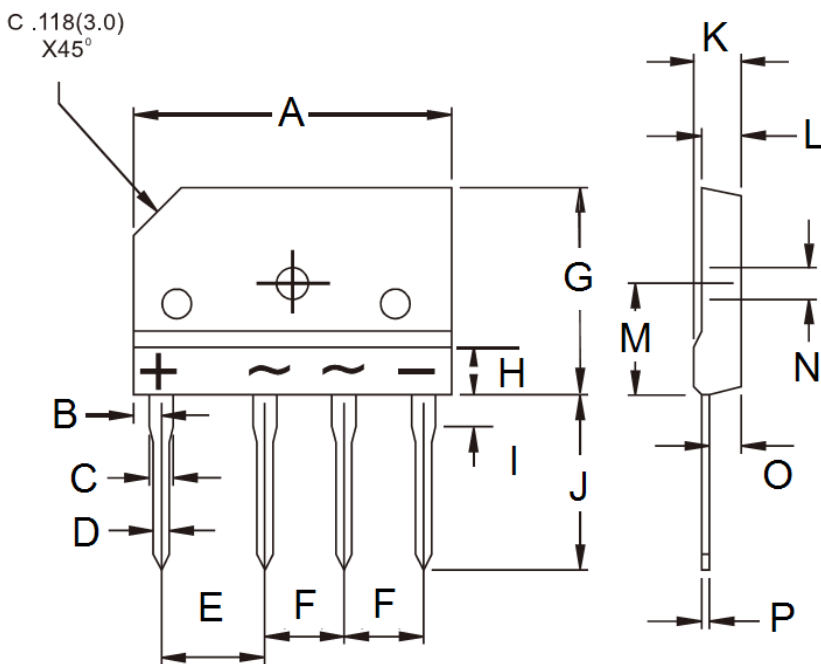


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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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