

Taiwan Semiconductor

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 definition



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 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

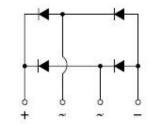
Weight: 7.15g (approximately)



TS-6P







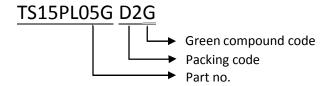
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)							
PARAMETER	SYMBOL	TS15PL05G	TS15PL06G	UNIT			
Maximum repetitive peak reverse voltage	V_{RRM}	600	800	V			
Maximum RMS voltage	V_{RMS}	420	560	V			
Maximum DC blocking voltage	V _{DC}	600	800	V			
Maximum average forward rectified current	I _{F(AV)}	15		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)	l ² t	166		A ² s			
Peak forward surge current, 1 ms single half sine-wave superimposed on rated load	I _{FSM}	630		А			
Maximum instantaneous forward voltage (Note 1) I _F = 7.5A	V _F	0.90	0.93	V			
Maximum DC reverse current T_J =25°Cat rated DC blocking voltage T_J =125°C	I _R	5 150		μА			
Typical thermal resistance	$R_{ heta JC}$	2		°C/W			
Operating junction temperature range	TJ	- 55 to +150		°C			
Storage temperature range	T _{STG}	- 55 to +150		°C			

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

Document Number: DS_D1411010

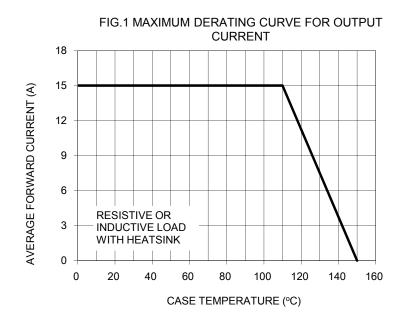


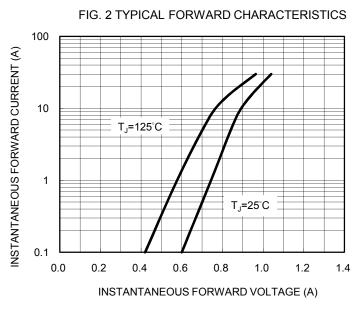
ORDER INFORMATION (EXAMPLE)

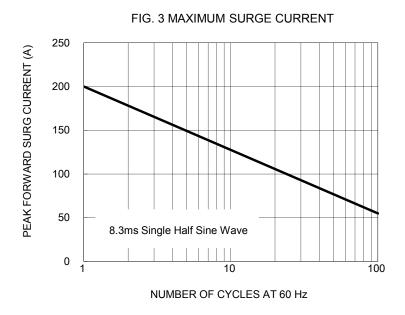


RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)







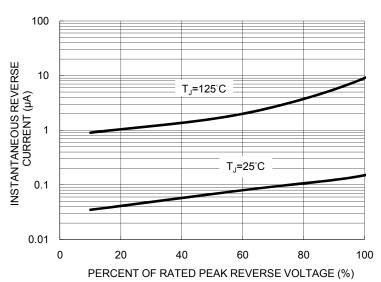
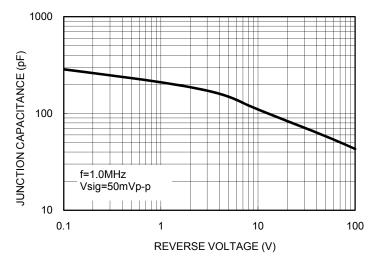


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

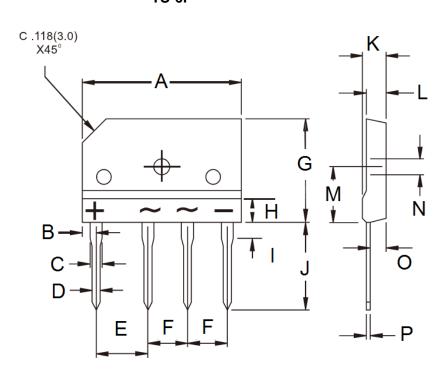
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FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS TS-6P



DIM.	Unit (mm)		Unit (inch)	
	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 F = Factory Code

Document Number: DS_D1411010





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