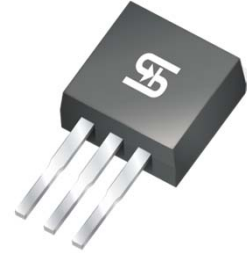


## 10A, 200V Trench Schottky Rectifier

### FEATURES

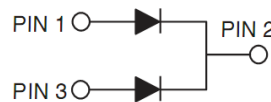
- Patented Trench Schottky technology
- Excellent high temperature stability
- Low forward voltage
- Low power loss/ high efficiency
- High forward surge capability
- Compliant to RoHS directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



**I<sup>2</sup>PAK**

### TYPICAL APPLICATIONS

Trench Schottky barrier rectifier is designed for high frequency switched mode power supplies such as adapters, lighting, and DC/DC converters.



### MECHANICAL DATA

**Case:** I<sup>2</sup>PAK

Molding compound meets UL 94 V-0 flammability rating

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:** As marked

**Weight:** 1.6 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> = 25°C unless otherwise noted)					
PARAMETER		SYMBOL	TS110L200CW		UNIT
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	200		V
Maximum average forward rectified current	per device	I <sub>F(AV)</sub>	10		A
	per diode		5		
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	100		A
Voltage rate of change (Rated V <sub>R</sub> )		dV/dt	10000		V/μs
			TYP	MAX	
Instantaneous forward voltage per diode (Note1)	I <sub>F</sub> = 5A	T <sub>J</sub> = 25°C	V <sub>F</sub>	0.84	0.90
	I <sub>F</sub> = 10A			0.92	0.98
	I <sub>F</sub> = 5A	T <sub>J</sub> = 125°C		0.72	0.78
	I <sub>F</sub> = 10A			0.80	0.86
Instantaneous reverse current per diode at rated reverse voltage	T <sub>J</sub> = 25°C		I <sub>R</sub>	-	50
	T <sub>J</sub> = 125°C			-	5
Typical thermal resistance per diode		R <sub>θJC</sub>	5		°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 pulse width=300μs, 1% duty cycle

ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSI10L200CW	C0	G	I <sup>2</sup> PAK	50 / Tube

EXAMPLE				
EXAMPLE PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSI10L200CW C0G	TSI10L200CW	C0	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

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

FIG. 1 FORWARD CURRENT DERATING CURVE

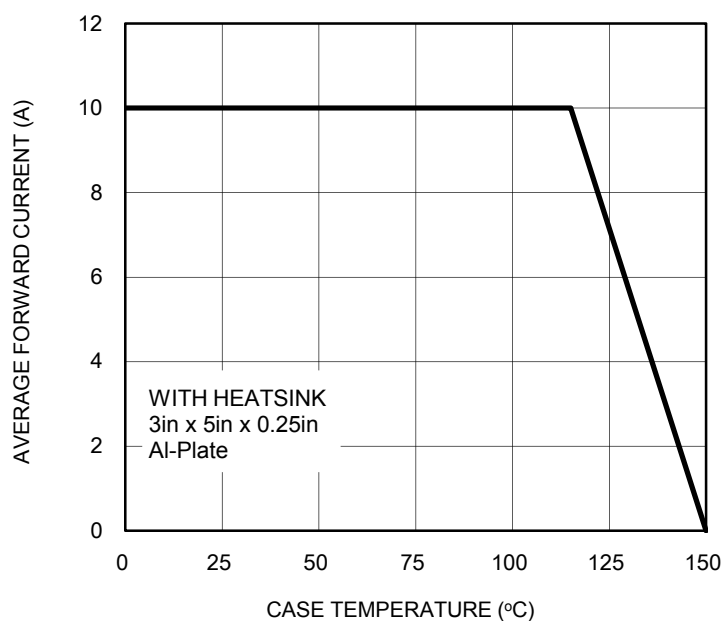


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

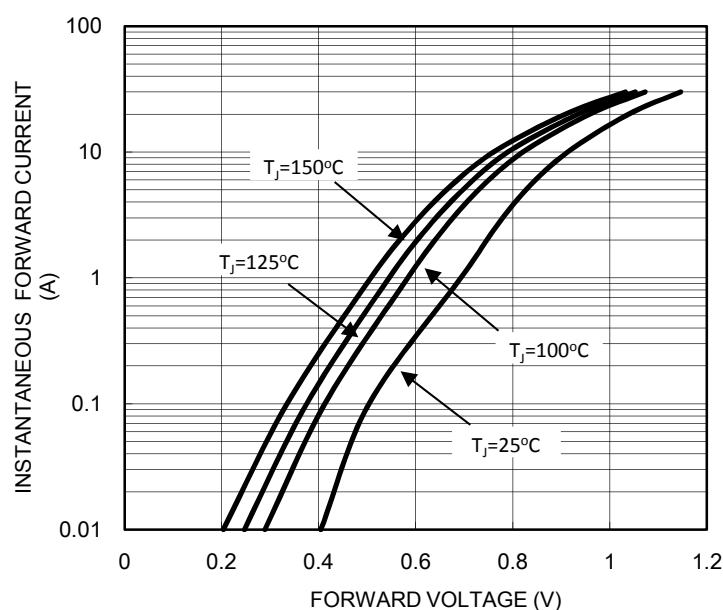


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

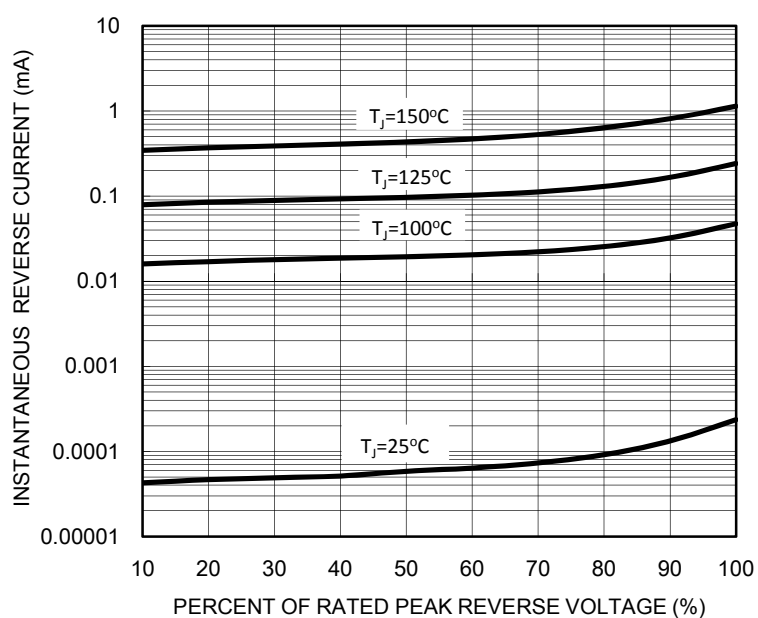
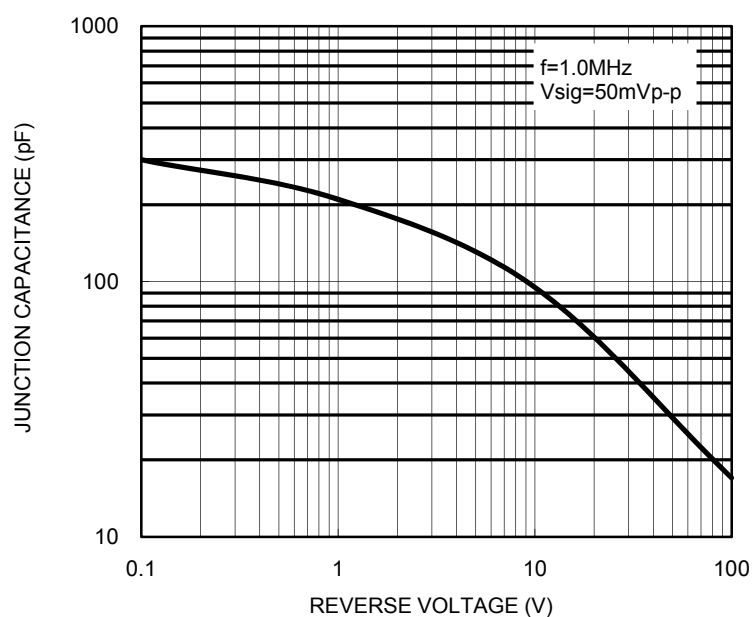
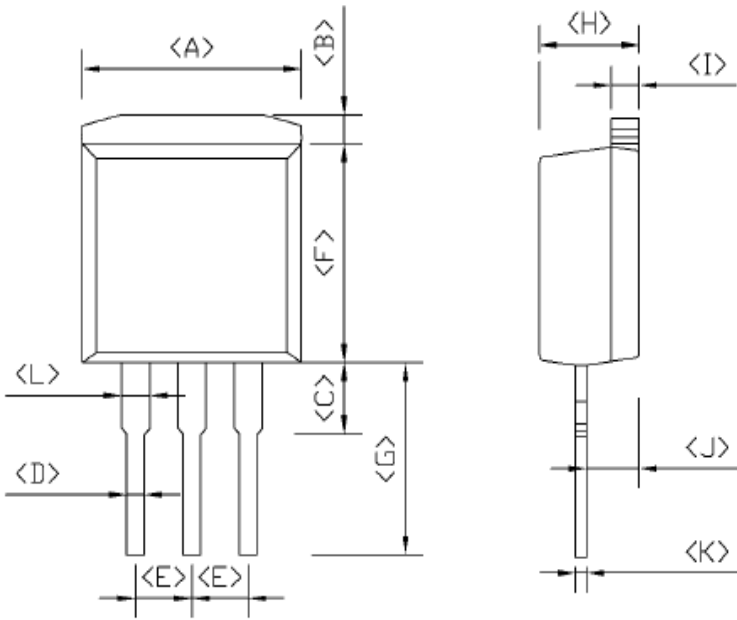


FIG. 4 TYPICAL JUNCTION CAPACITANCE



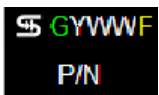
PACKAGE OUTLINE DIMENSIONS

**I<sup>2</sup>PAK**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	-	10.50	-	0.413
B	1.14	1.40	0.045	0.055
C	2.80	4.20	0.110	0.165
D	0.68	0.94	0.027	0.037
E	2.41	2.67	0.095	0.105
F	9.07	9.47	0.357	0.373
G	7.79	9.35	0.307	0.368
H	4.40	4.70	0.173	0.185
I	1.14	1.40	0.045	0.055
J	2.20	2.80	0.087	0.110
K	0.35	0.64	0.014	0.025
L	0.95	1.45	0.037	0.057

MARKING DIAGRAM



- P/N = Marking Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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