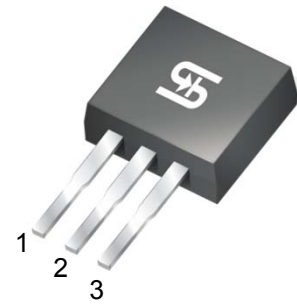


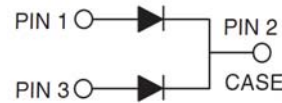
10A, 100V - 200V Trench Schottky Rectifiers

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 definition



I²PAK



TYPICAL APPLICATIONS

Trench Schottky barrier rectifier are designed for high frequency miniature switched mode power supplies such as adapters, lighting and on-board DC/DC converters.

MECHANICAL DATA

Case: I²PAK

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

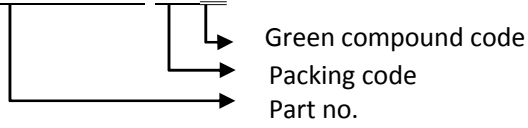
Weight: 1.6 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A = 25°C unless otherwise noted)												
PARAMETER			SYMBOL	TSI10H 100CW		TSI10H 120CW		TSI10H 150CW		TSI10H 200CW		UNIT
Maximum repetitive peak reverse voltage			V _{RRM}	100		120		150		200		V
Maximum average forward rectified current	per device		I _{F(AV)}	10								A
	per diode			5								
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode			I _{FSM}	100								A
Voltage rate of change (Rated V _R)			dV/dt	10000								V/μs
				TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	
Instantaneous forward voltage per diode (Note1)	I _F = 5A	T _J = 25°C	V _F	0.62	0.70	0.69	0.79	0.78	0.88	0.81	0.91	V
	I _F = 5A	T _J = 125°C		0.55	0.63	0.58	0.66	0.64	0.72	0.67	0.75	
Instantaneous reverse current per diode at rated reverse voltage		T _J = 25°C	I _R	-	100	-	100	-	100	-	100	μA
		T _J = 125°C		-	15	-	15	1.5	10	1.5	10	mA
Typical thermal resistance per diode			R _{θJC}	3.2								°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 pulse width=300μs, 1% duty cycle

ORDER INFORMATION (EXAMPLE)

TSI10H150CW C0G



RATINGS AND CHARACTERISTICS CURVES

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

FIG. 1 FORWARD CURRENT DERATING CURVE

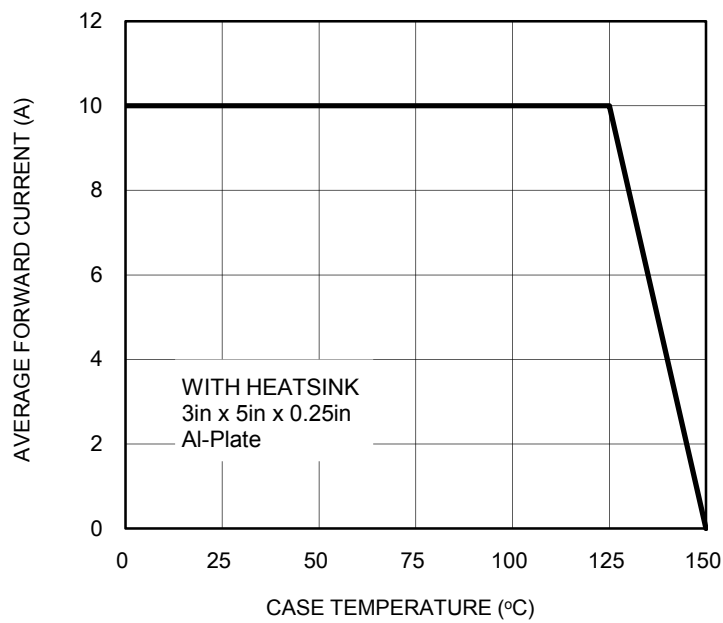


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

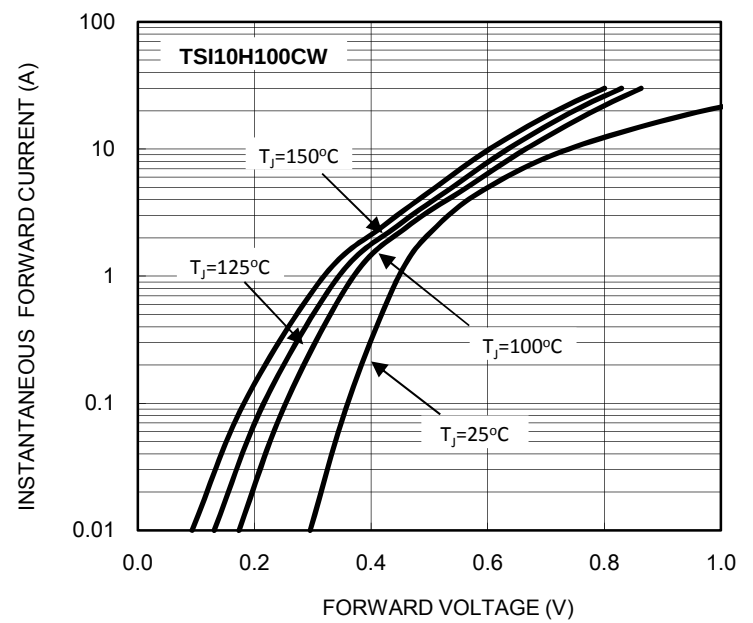


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

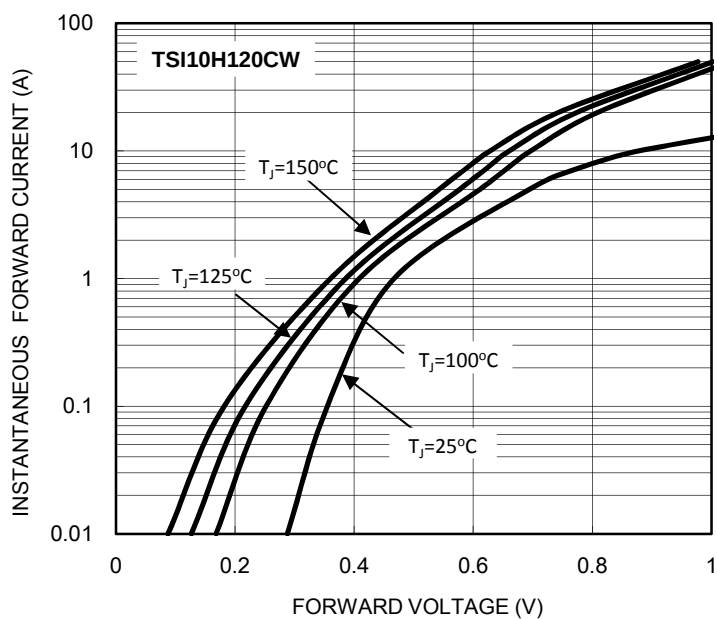


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

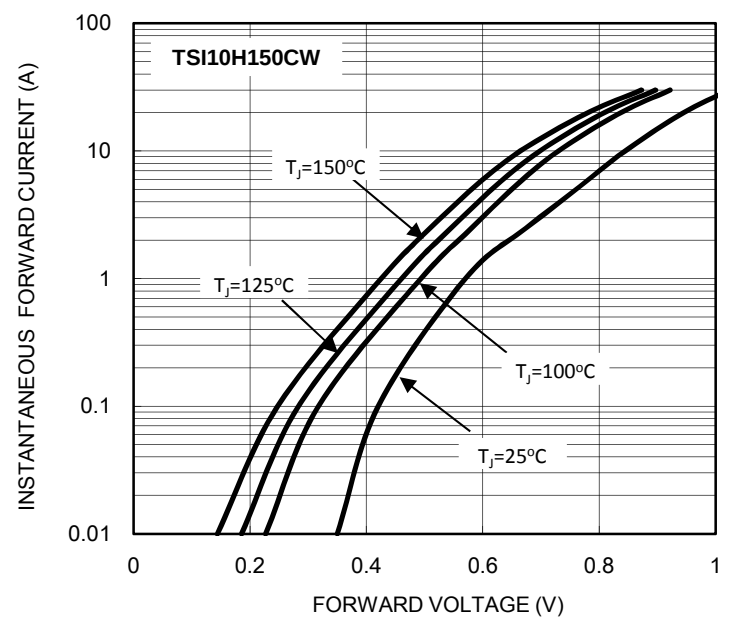


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

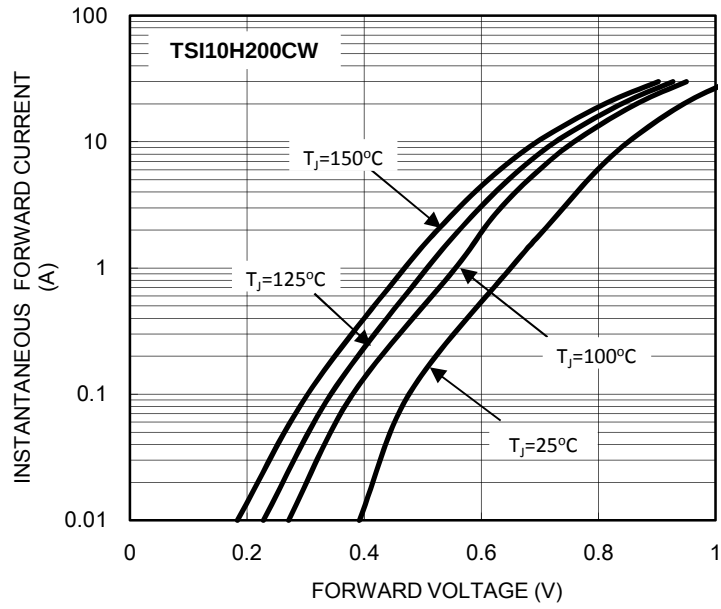


FIG. 6 TYPICAL REVERSE CHARACTERISTICS

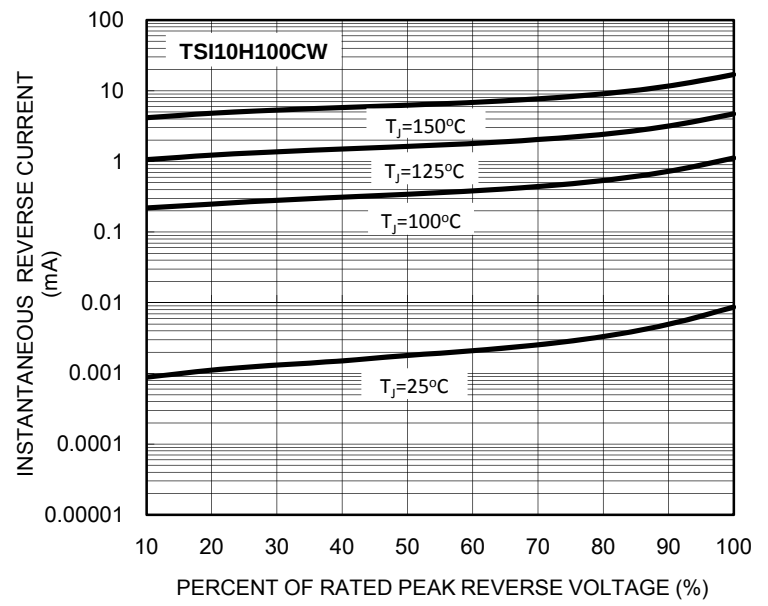


FIG. 7 TYPICAL REVERSE CHARACTERISTICS

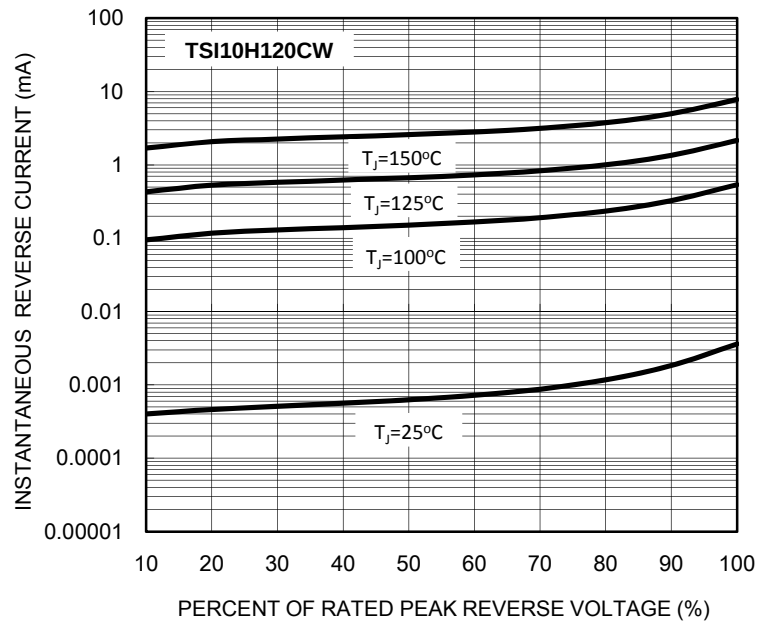


FIG. 8 TYPICAL REVERSE CHARACTERISTICS

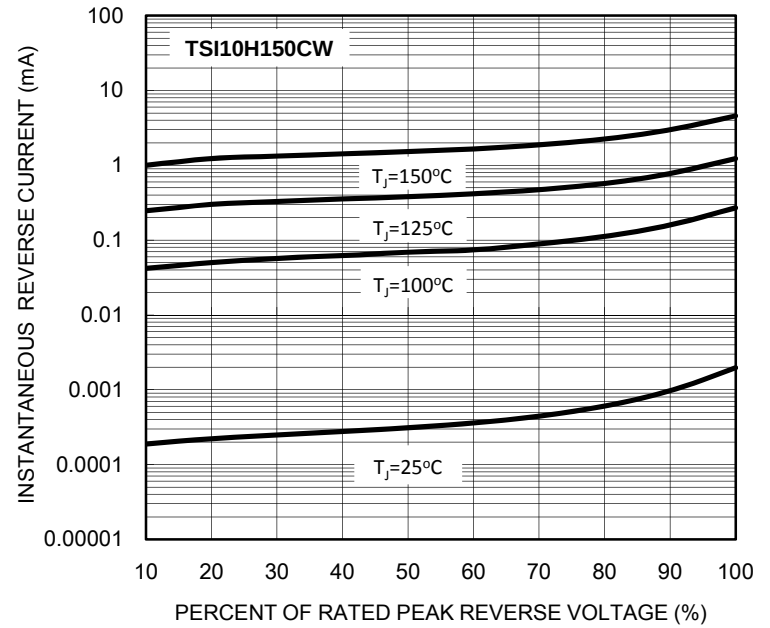


FIG. 9 TYPICAL REVERSE CHARACTERISTICS

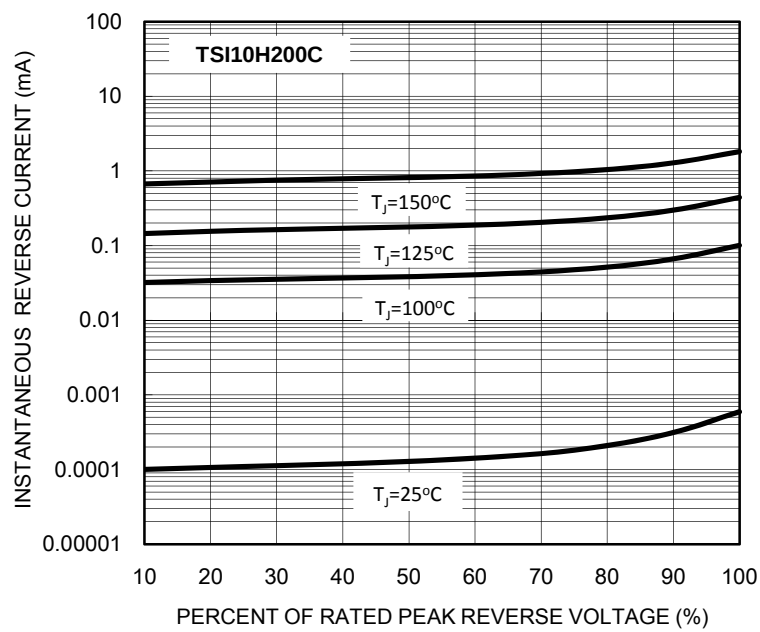
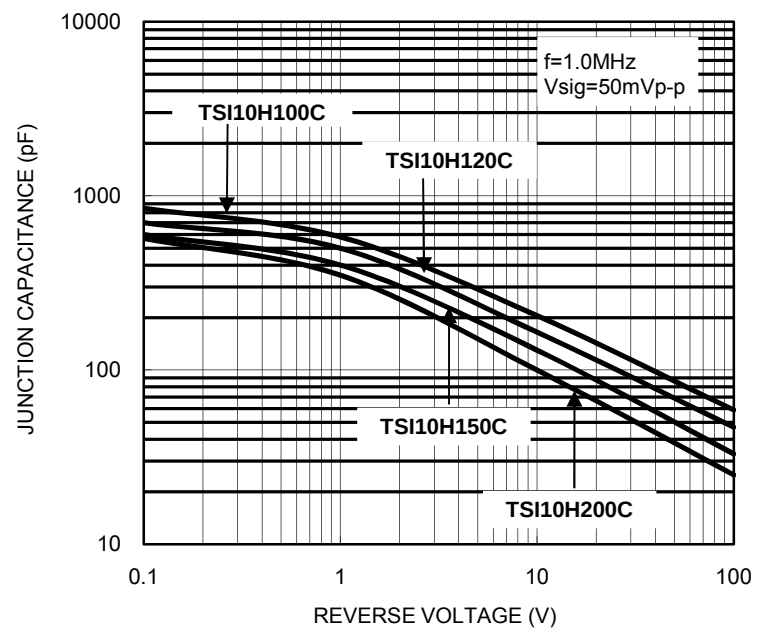
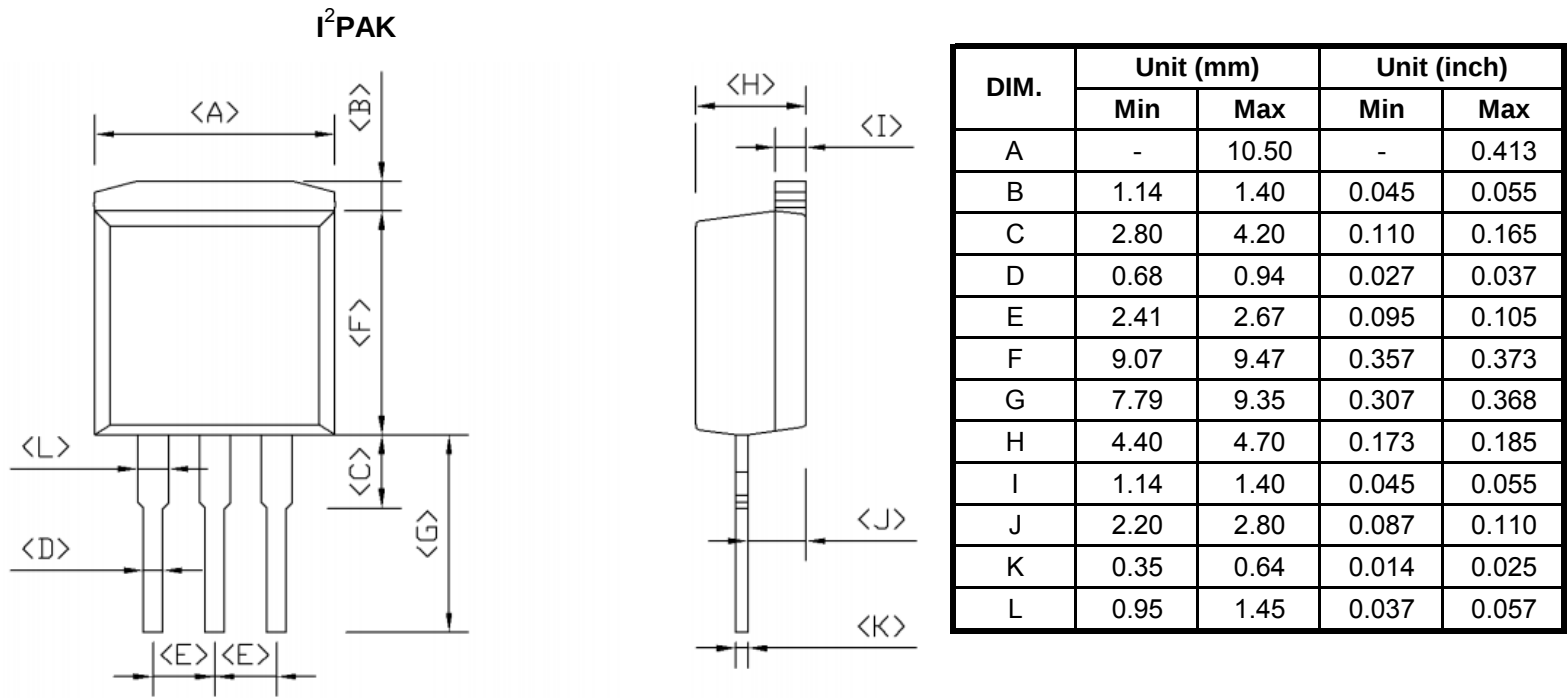


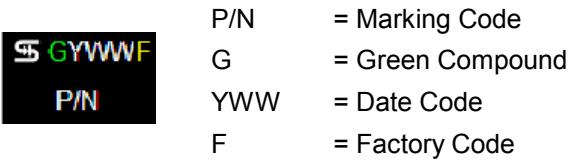
FIG. 10 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS



MARKING DIAGRAM



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