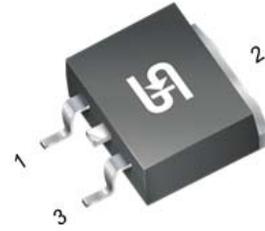


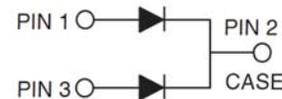
## 10A, 200V Trench Schottky Rectifier

### 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



**TO-263AB (D<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:** TO-263AB (D<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	TSD10L200CW		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	μA
	T <sub>J</sub> = 125°C			-	5	mA
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
TSD10L200CW	C0	G	D <sup>2</sup> PAK	50 / Tube

**EXAMPLE**

EXAMPLE PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSD10L200CW C0G	TSD10L200CW	C0	G	Green compound

**RATINGS AND CHARACTERISTICS CURVES**

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

FIG. 1 FORWARD CURRENT DERATING CURVE

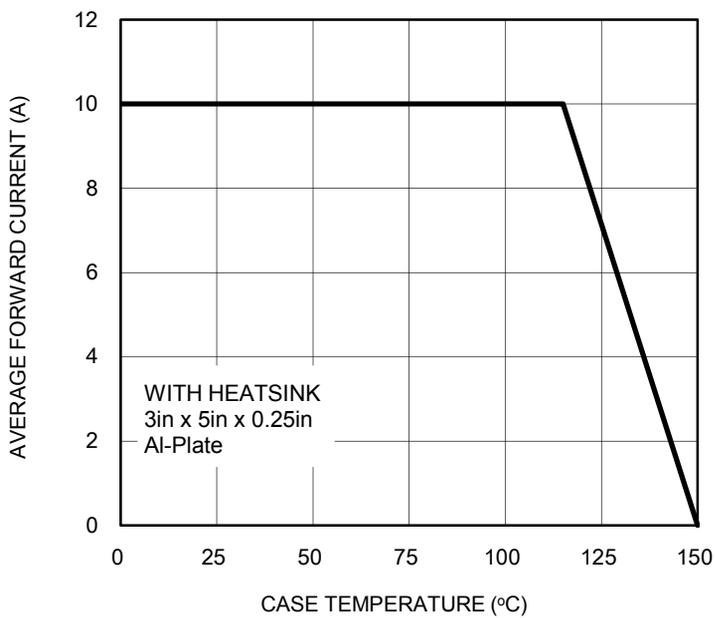


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

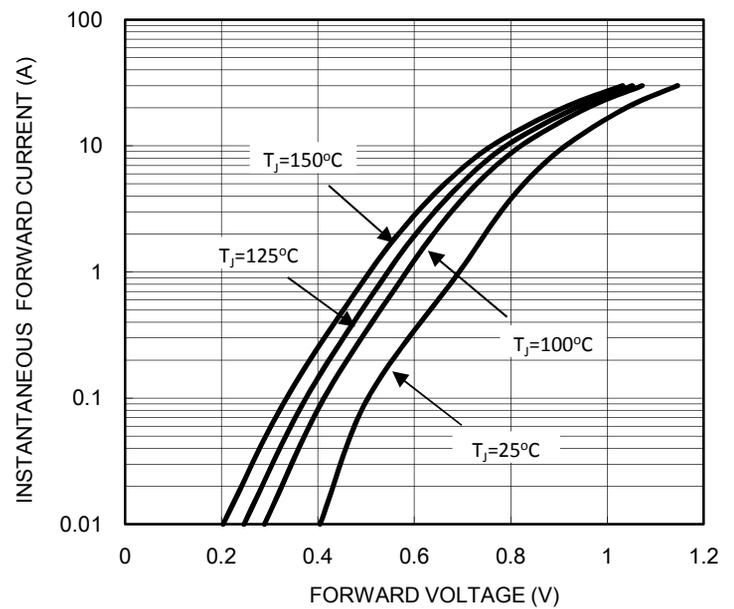


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

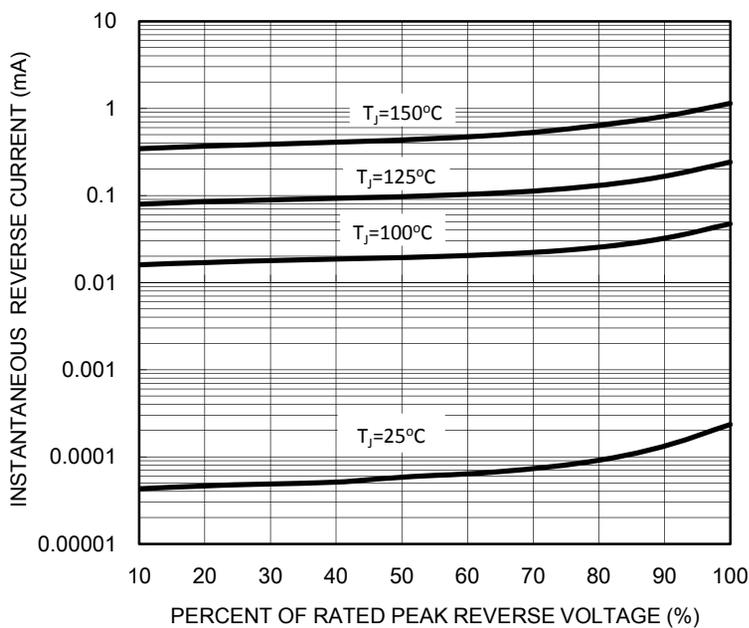
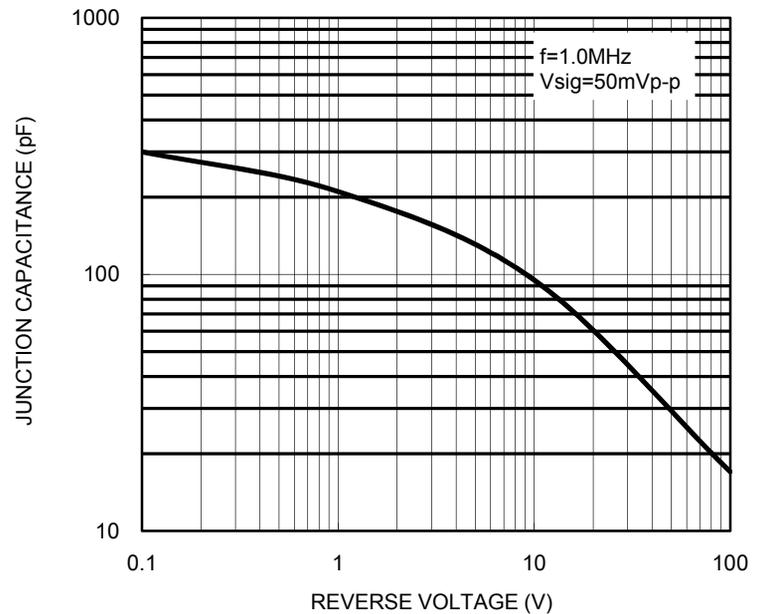
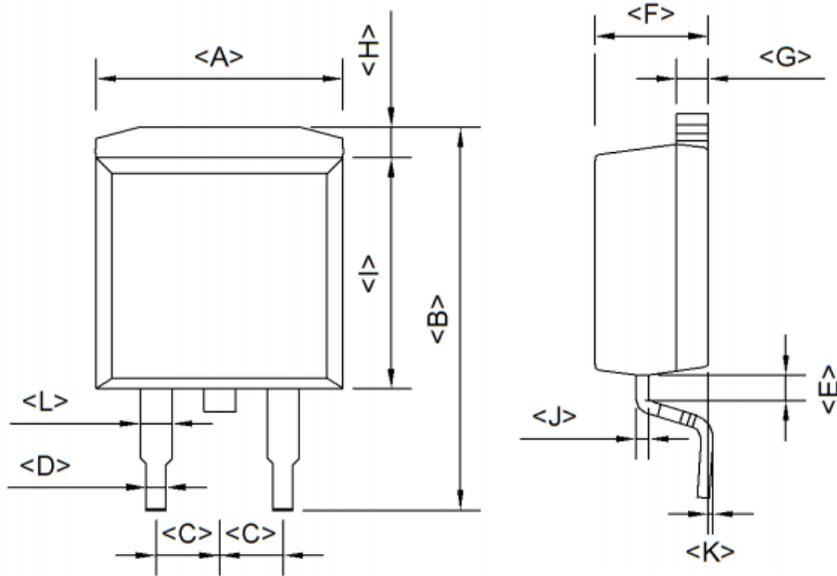


FIG. 4 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS  
**TO-263AB (D<sup>2</sup>PAK)**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	9.600	10.050	0.378	0.396
B	14.920	15.520	0.587	0.611
C	2.540 (TYP)		0.100 (TYP)	
D	0.675	0.975	0.027	0.038
E	1.778 (TYP)		0.070 (TYP)	
F	4.390	4.790	0.173	0.189
G	1.150	1.450	0.045	0.057
H	1.600 (TYP)		0.063 (TYP)	
I	9.170	9.370	0.361	0.369
J	0.400	0.600	0.016	0.024
K	0.254 (TYP)		0.010 (TYP)	
L	1.150	1.550	0.045	0.061

MARKING DIAGRAM



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

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