



## 10A, 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

#### **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-220AB

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

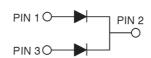
Meet JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 0.56 Nm max. **Weight:** 1.88 g (approximately)









MAXIMUM RATINGS	S AND ELE	CTRICAL	CHARACTER	ISTICS (T <sub>A</sub> = 25°C un	less otherwise noted)	
PARAMETER			SYMBOL	TST10I	_200CW	UNIT
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	200		V	
Maximum average forward	per device			10		А
rectified current	per	diode	I <sub>F(AV)</sub>		5	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	100		А	
Voltage rate of change (Rated V <sub>R</sub> )			dV/dt	10000		V/µs
				TYP	MAX	
	$I_F = 5A$	T _ 25°C		0.84	0.90	
Instantaneous forward voltage per diode (Note1)	I <sub>F</sub> = 10A	$T_J = 25^{\circ}C$	V <sub>F</sub>	0.92	0.98	V
	I <sub>F</sub> = 5A	T <sub>.l</sub> = 125°C	V <sub>F</sub>	0.72	0.78	V
	I <sub>F</sub> = 10A	1j = 125 C		0.80	0.86	
Instantaneous reverse current per diode at rated reverse voltage $T_J = 25^{\circ}C$ $T_J = 125^{\circ}C$		,	-	50	μA	
		T <sub>J</sub> = 125°C	I <sub>R</sub>	-	5	mA
Typical thermal resistance per diode		$R_{\theta JC}$	5		°C/W	
Operating junction temperature range		TJ	- 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

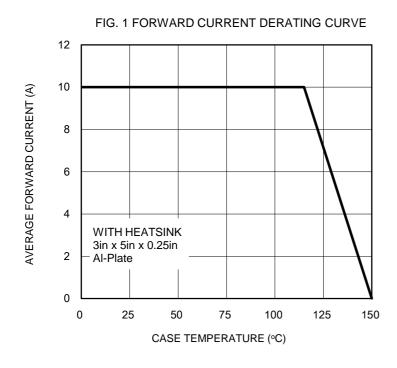


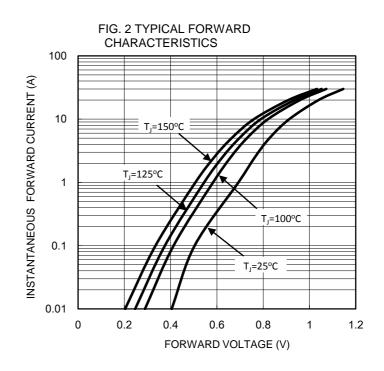
ORDERING INFORMATION					
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING	
TST10L200CW	C0	G	TO-220AB	50 / Tube	

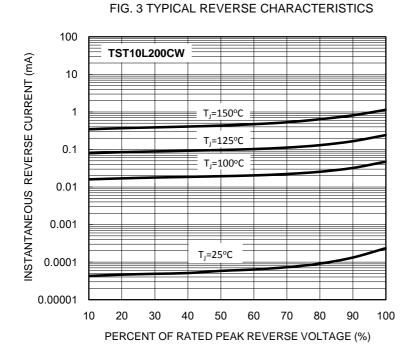
EXAMPLE						
PREFERRED PART NO. PART NO.		PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION		
TST10L200CW C0G	TST10L200CW	C0	G	Green compound		

## **RATINGS AND CHARACTERISTICS CURVES**

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







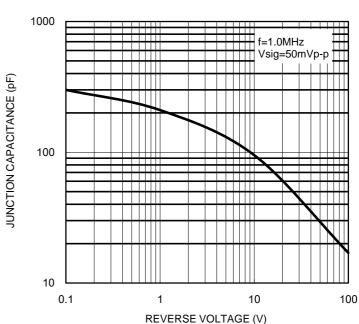
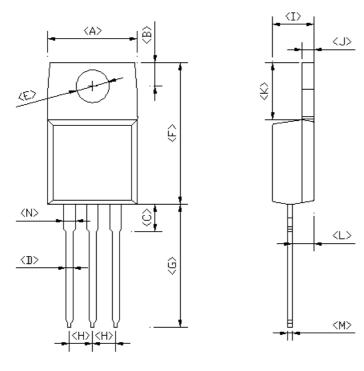


FIG. 4 TYPICAL JUNCTION CAPACITANCE



## **PACKAGE OUTLINE DIMENSIONS**

## **TO-220AB**



DIM.	Unit	(mm)	Unit (inch)		
Dilvi.	Min	Max	Min	Max	
Α	-	10.50	-	0.413	
В	2.54	3.44	0.100	0.135	
С	2.80	4.20	0.110	0.165	
D	0.68	0.94	0.027	0.037	
Е	3.54	4.00	0.139	0.157	
F	14.60	16.00	0.575	0.630	
G	13.19	14.79	0.519	0.582	
Н	2.41	2.67	0.095	0.105	
I	4.42	4.76	0.174	0.187	
J	1.14	1.40	0.045	0.055	
K	5.84	6.86	0.230	0.270	
L	2.20	2.80	0.087	0.110	
М	0.35	0.64	0.014	0.025	
N	0.95	1.45	0.037	0.057	

## **MARKING DIAGRAM**



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

Version: A1511



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