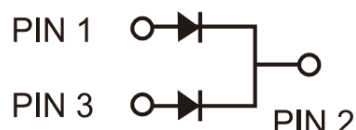


Trench Schottky Rectifier

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 definition


ITO-220AB


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: ITO-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: 1.7 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)											
PARAMETER				SYMBOL	TSF10H45C			TSF10H60C			UNIT
Maximum repetitive peak reverse voltage				V _{RRM}	45			60			V
Maximum average forward rectified current		per device		I _{F(AV)}	10						A
		per diode			5						
Peak forward surge current, 8.3 ms 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
					Min.	Typ.	Max.	Min.	Typ.	Max.	
Instantaneous forward voltage per diode (Note1)		I _F = 2.5A	T _J = 25°C	V _F	-	0.44	-	-	0.46	-	V
		I _F = 5A			-	0.48	0.58	-	0.54	0.62	
		I _F = 2.5A	T _J = 125°C		-	0.33	-	-	0.38	-	
		I _F = 5A			-	0.40	0.50	-	0.48	0.56	
Instantaneous reverse current per diode at rated reverse voltage			T _J = 25°C	I _R	-	-	500	-	-	500	μA
			T _J = 125°C		-	5	15	-	6	25	mA
Typical thermal resistance per diode				R _{θJC}	5.5						°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

ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSH10HxxC (Note 1)	C0	G	ITO-220AB	50 / Tube

Note 1: "xx" defines voltage from 45V (TSF10H45C) to 60V (TSF10H60C)

EXAMPLE				
PREFERRED PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSF10H45C C0G	TSF10H45C	C0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1- FORWARD CURRENT DERATING CURVE

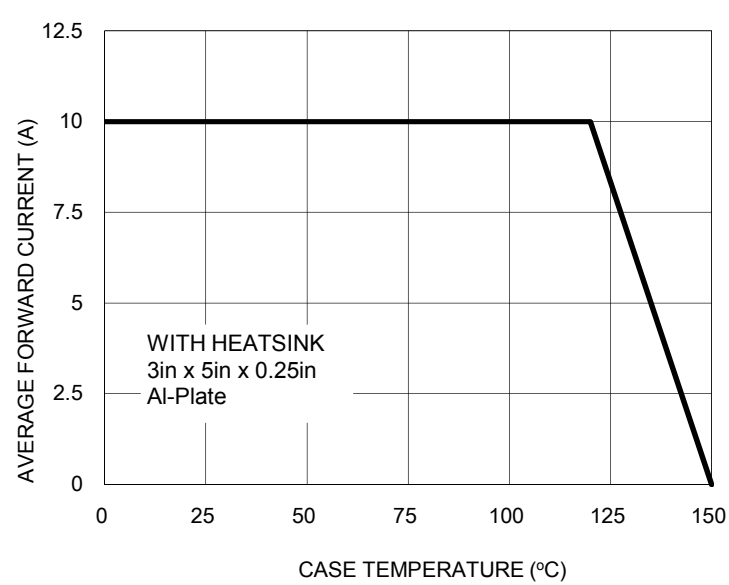


FIG. 2- TYPICAL FORWARD CHARACTERISTICS

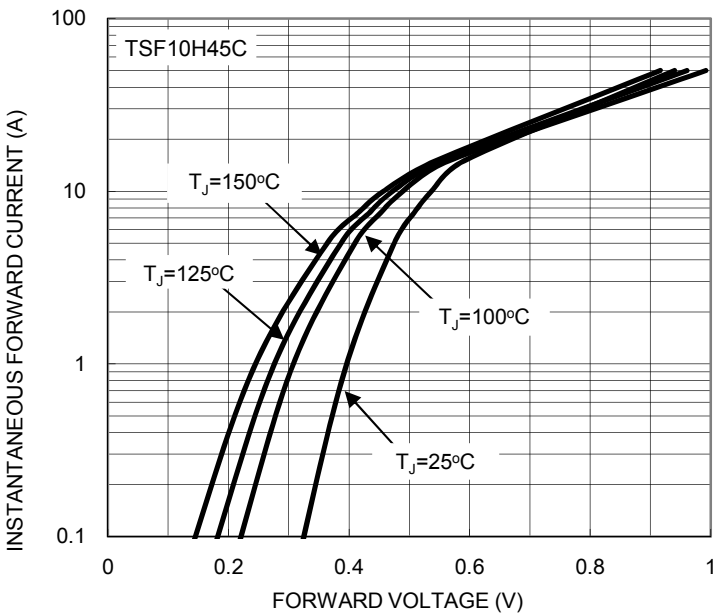


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

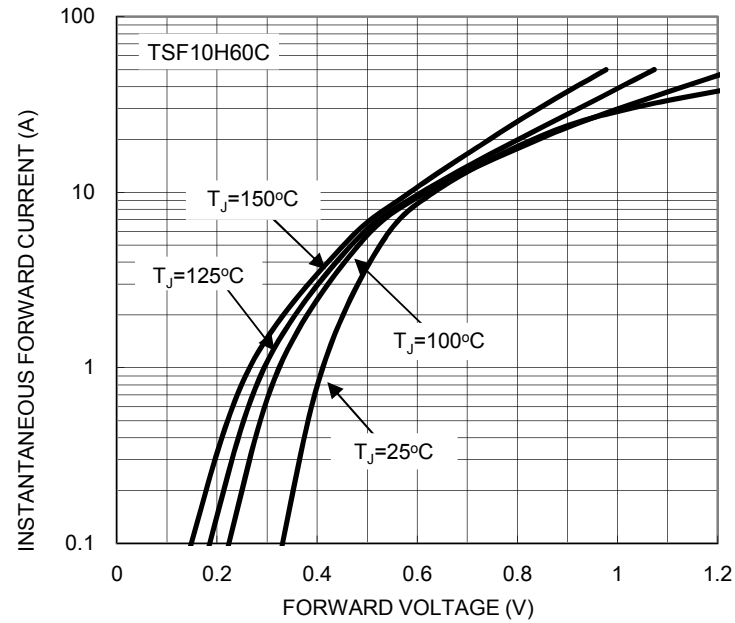


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

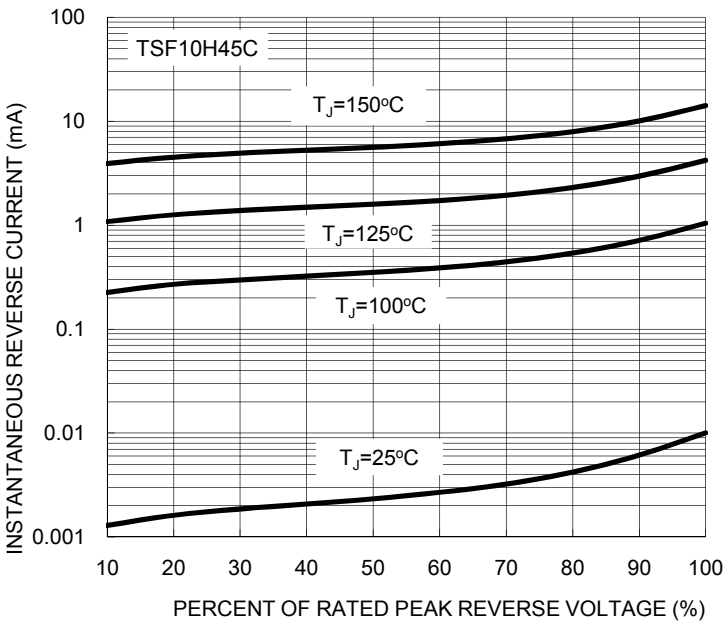


FIG. 5- TYPICAL REVERSE CHARACTERISTICS

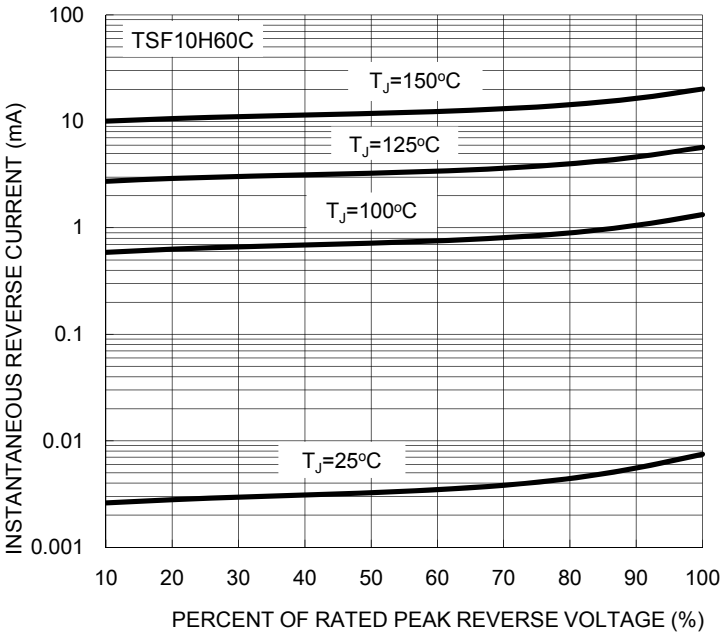
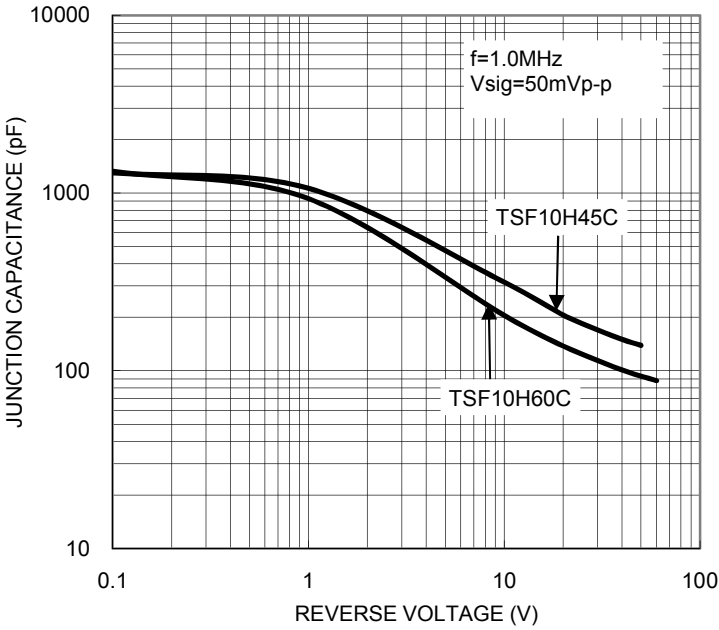
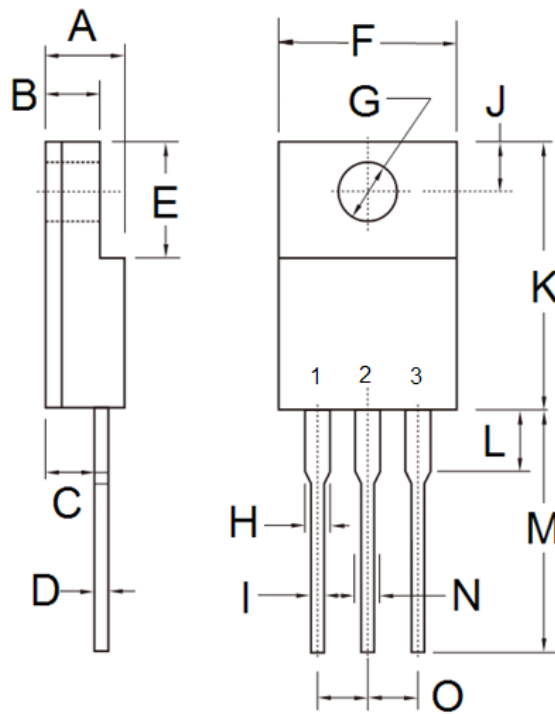


FIG. 6- TYPICAL JUNCTION CAPACITANCE

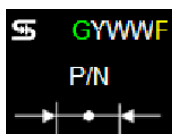


PACKAGE OUTLINE DIMENSIONS
ITO-220AB



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.30	4.70	0.17	0.19
B	2.50	3.16	0.10	0.12
C	2.30	2.96	0.09	0.12
D	0.46	0.76	0.02	0.03
E	6.30	6.90	0.25	0.27
F	9.60	10.30	0.38	0.41
G	3.00	3.40	0.12	0.13
H	0.95	1.45	0.04	0.06
I	0.50	0.90	0.02	0.04
J	2.40	3.20	0.09	0.13
K	14.80	15.50	0.58	0.61
L	-	4.10	-	0.16
M	12.60	13.80	0.50	0.54
N	-	1.80	-	0.07
O	2.41	2.67	0.09	0.11

MARKING DIAGRAM



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

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