

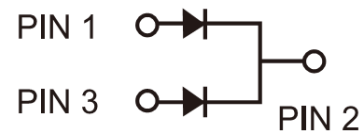
Trench Schottky Rectifier

FEATURES

- Patented Trench Schottky technology
- Excellent high temperature stability
- Low forward voltage
- Lower 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



MECHANICAL DATA

Case: ITO-220AB

Molding compound meets UL 94 V-0 flammability rating

Base P/N with suffix "M" on P/N - commercial grade

Base P/N with suffix "G" on packing code - green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: As marked

Mounting torque: 0.56 Nm max.

Weight: 1.7g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)						
PARAMETER		SYMBOL	TSF30U60C			UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	60			V
Maximum average forward rectified current	per device	$I_{F(AV)}$	30			A
	per diode		15			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode		I_{FSM}	250			A
Peak repetitive reverse surge current (Note 1)		I_{RRM}	3			A
Isolation voltage from terminal to heatsink t = 1 min		V_{AC}	2000			V
Breakdown voltage ($I_R = 1.0mA, T_a = 25^\circ C$)		V_{BR}	MIN.	TYP.	MAX.	V
			60	-	-	
Maximum instantaneous forward voltage per diode (Note 2)	$I_F = 15A$	$T_J = 25^\circ C$	V_F	-	0.57	V
	$I_F = 15A$	$T_J = 125^\circ C$	V_F	-	0.53	
Maximum instantaneous reverse current per diode at rated reverse voltage	$T_J = 25^\circ C$		I_R	-	500	μA
	$T_J = 125^\circ C$			-	60	mA
Typical thermal resistance per diode		$R_{\theta JC}$	3			$^\circ C/W$
Operating junction temperature range		T_J	- 55 to +150			$^\circ C$
Storage temperature range		T_{STG}	- 55 to +150			$^\circ C$

Note 1: 2.0 μs Pulse Width, f=1.0 kHz

Note 2: Pulse Test with Pulse Width=300 μs , 1% Duty Cycle

ORDERING INFORMATION

PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSF30U60C	M	C0	G	ITO-220AB	50 / Tube

EXAMPLE

PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSF30U60CMC0	TSF30U60C	M	C0		Commercial grade
TSF30U60CMC0G	TSF30U60C	M	C0	G	Commercial grade Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

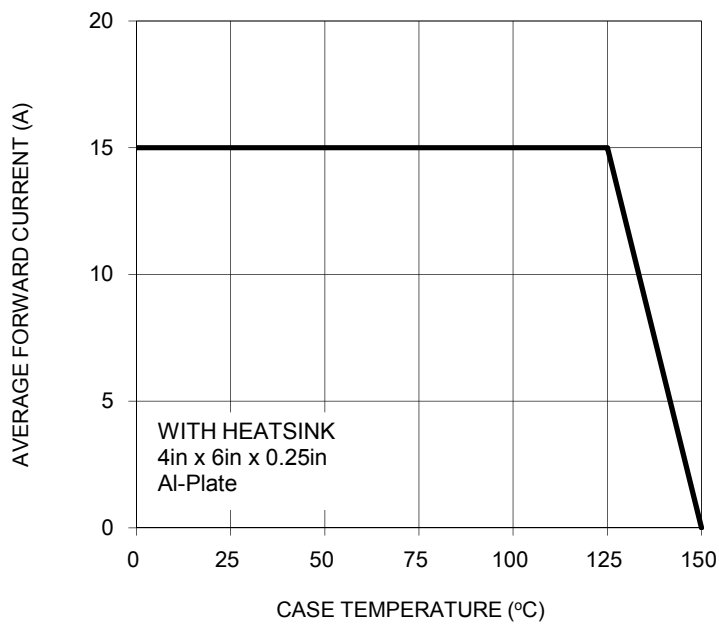


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

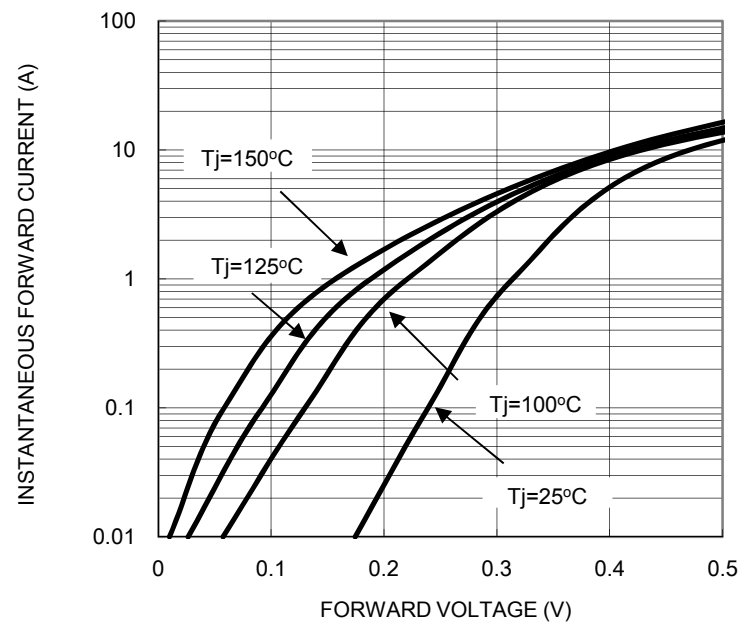


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

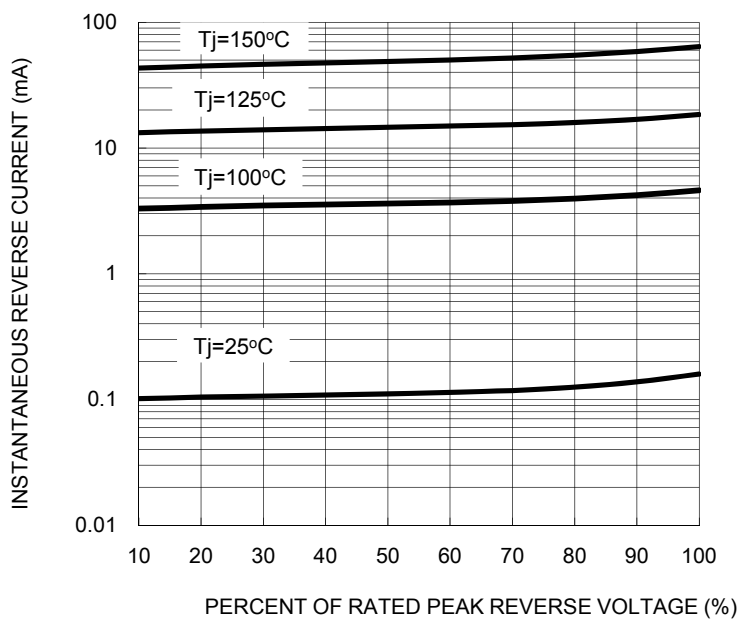
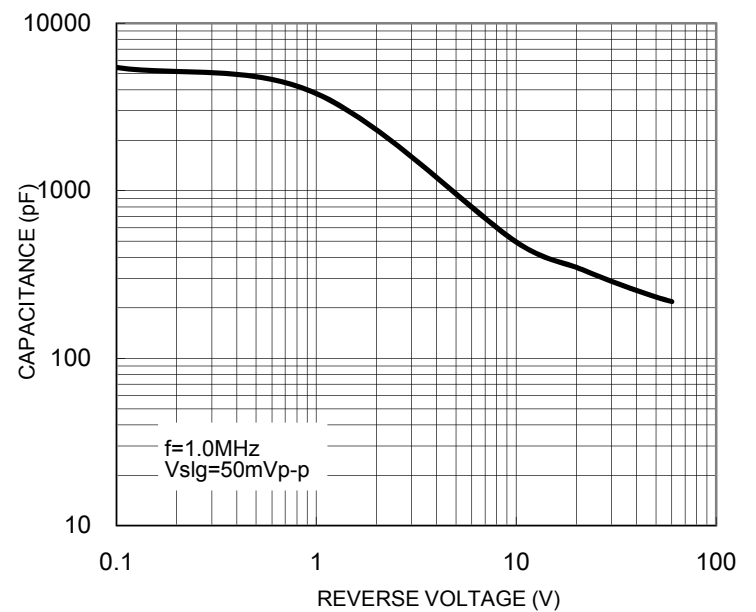
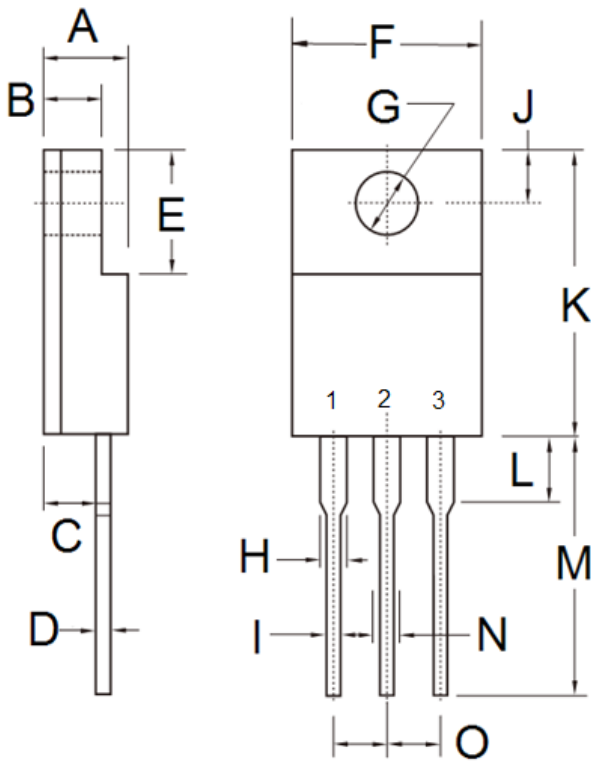


FIG. 4 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS
ITO-220AB



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.30	4.70	0.169	0.185
B	2.50	3.16	0.098	0.124
C	2.30	2.96	0.091	0.117
D	0.46	0.76	0.018	0.030
E	6.30	6.90	0.248	0.272
F	9.60	10.30	0.378	0.406
G	3.00	3.40	0.118	0.134
H	0.95	1.45	0.037	0.057
I	0.50	0.90	0.020	0.035
J	2.40	3.20	0.094	0.126
K	14.80	15.50	0.583	0.610
L	-	4.10	-	0.161
M	12.60	13.80	0.496	0.543
N	-	1.45	-	0.057
O	2.41	2.67	0.095	0.105

MARKING DIAGRAM



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

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.