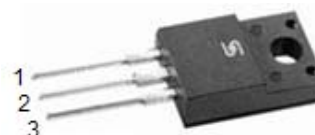


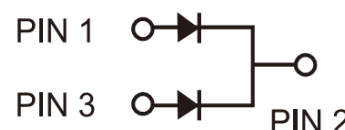
## Dual High-Voltage Trench MOS Barrier Schottky Rectifier

### FEATURES

- Patented Trench MOS Barrier 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 "G" on packing code - halogen-free, RoHS compliant

**Terminal:** Matte tin plated leads, solderable per JESD22-B102  
Meet JESD 201 class 1A whisker test

**Polarity:** As marked

**Mounting torque:** 5 in-lbs. max.

**Weight:** 1.7g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)						
PARAMETER		SYMBOL	TSF10H100C			UNIT
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	100			V
Maximum average forward rectified current	per device	I <sub>F(AV)</sub>	10			A
	per diode		5			
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode		I <sub>FSM</sub>	120			A
Peak repetitive reverse surge current (Note 1)		I <sub>RRM</sub>	0.5			A
Non-repetitive avalanche energy at L=60mH, per diode		E <sub>AS</sub>	60			mJ
Voltage rate of change (Rated V <sub>R</sub> )		dV/dt	10000			V/μs
Isolation voltage from terminal to heatsink t = 1 min		V <sub>AC</sub>	1500			V
Breakdown voltage ( I <sub>R</sub> =1.0mA )		V <sub>BR</sub>	MIN.	TYP.	MAX.	V
			100	-	-	
Instantaneous forward voltage per diode ( Note2 )	I <sub>F</sub> = 5A	V <sub>F</sub>	T <sub>J</sub> = 25°C	-	0.8	V
			T <sub>J</sub> = 125°C	-	0.7	
Instantaneous reverse current per diode at rated reverse voltage		I <sub>R</sub>	T <sub>J</sub> = 25°C	-	100	μA
			T <sub>J</sub> = 100°C	-	6	mA
Typical thermal resistance (Note 3)		R <sub>θJC</sub>	4.3			°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: 2.0 μs Pulse width, f=1.0 kHz

Note 2: Pulse test with pulse width=300 μs, 1% duty cycle

Note 3: Mount on heatsink size of 4in x 6in x 0.25in Al-plate

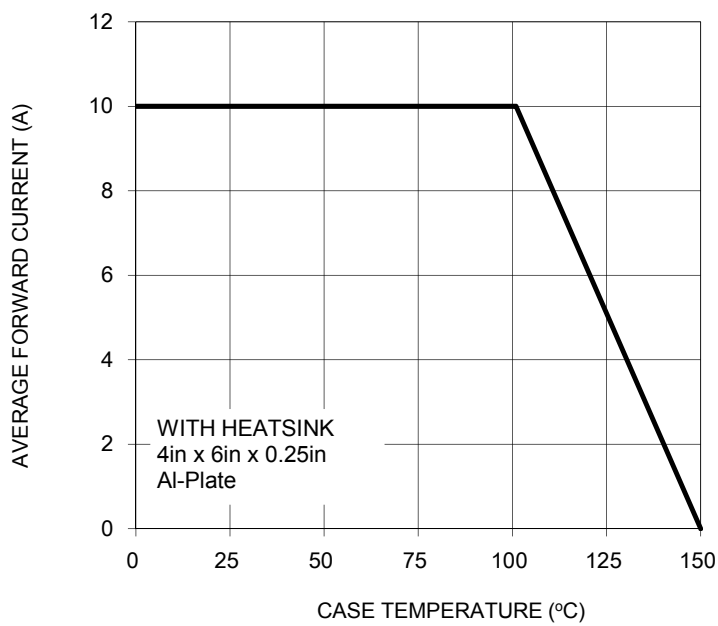
ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
TSH10H100C	C0	Suffix "G"	ITO-220AB	50 / Tube

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
TSF10H100C C0	TSF10H100C	C0		
TSF10H100C C0G	TSF10H100C	C0	G	Green compound

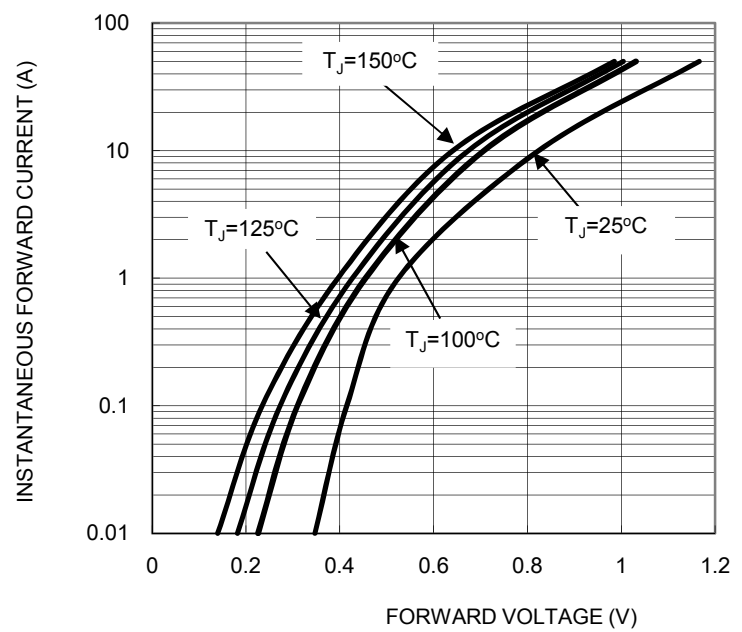
**RATINGS AND CHARACTERISTICS CURVES**

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

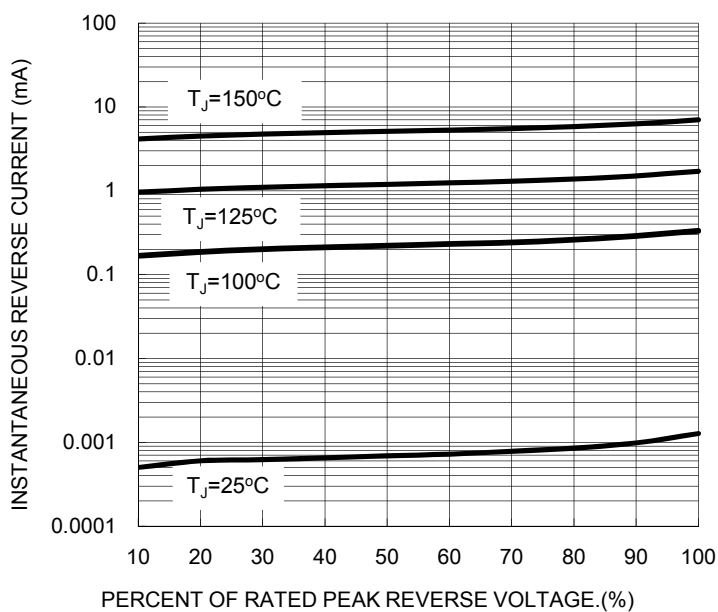
**FIG.1 FORWARD CURRENT DERATING CURVE**



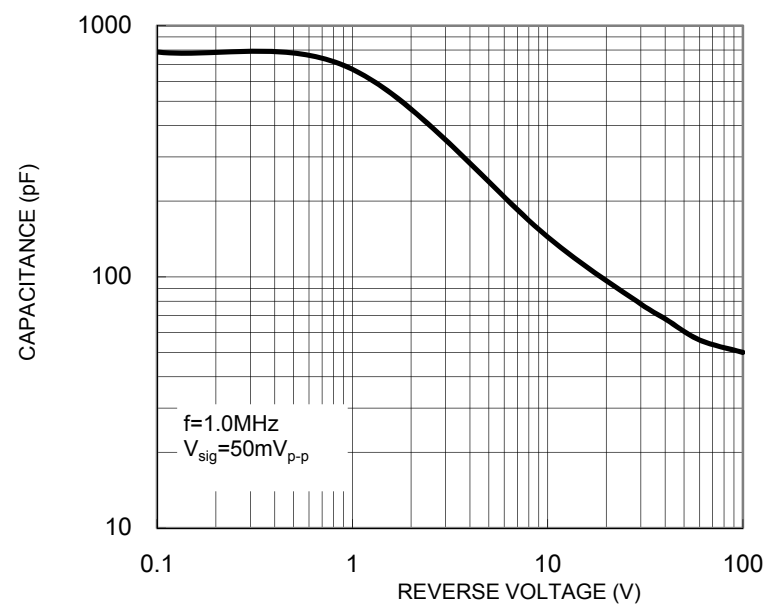
**FIG. 2 TYPICAL FORWARD CHARACTERISTICS**



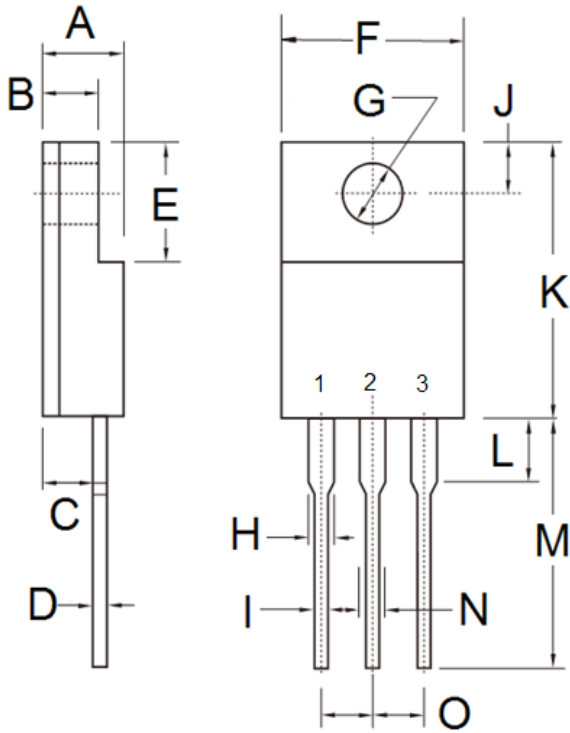
**FIG. 3 TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4 TYPICAL JUNCTION CAPACITANCE**



PACKAGE OUTLINE DIMENSIONS



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