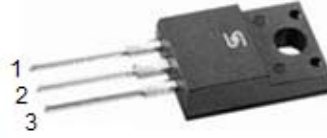
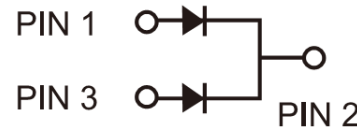


Dual High-Voltage Trench MOS Barrier Schottky Rectifier

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

Terminal: Matte tin plated leads, solderable per JESD 22-B102

Polarity: As marked

Mounting torque: 5 in-lbs. max.

Weight: 1.7 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)					
PARAMETER	SYMBOL	TSF2080C			UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	80			V
Maximum average forward rectified current	$I_{F(AV)}$	per device	20		A
		per diode	10		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode	I_{FSM}	100			A
Peak repetitive reverse surge current (Note 1)	I_{RRM}	0.5			A
Non-repetitive avalanche energy at L=60mH, per diode	E_{AS}	110			mJ
Voltage rate of change (Rated V_R)	dV/dt	10000			V/ μs
Isolation voltage from terminal to heatsink t = 1 min	V_{AC}	1500			V
Breakdown voltage ($I_R=1.0\text{mA}$)	V_{BR}	MIN.	TYP.	MAX.	V
		80	-	-	
Instantaneous forward voltage per diode (Note2)	$T_J = 25^{\circ}\text{C}$	$I_F = 5\text{A}$	V_F	0.52	V
		$I_F = 10\text{A}$	V_F	0.67	
	$T_J = 125^{\circ}\text{C}$	$I_F = 5\text{A}$	V_F	0.48	
		$I_F = 10\text{A}$	V_F	0.62	
Instantaneous reverse current per diode at rated reverse voltage	I_R	$T_J = 25^{\circ}\text{C}$	-	20	μA
		$T_J = 125^{\circ}\text{C}$	-	10	20
Typical thermal resistance (Note 3)	$R_{\theta JC}$	5			$^{\circ}\text{C}/\text{W}$
Operating junction temperature range	T_J	- 55 to + 150			$^{\circ}\text{C}$
Storage temperature range	T_{STG}	- 55 to + 150			$^{\circ}\text{C}$

Note 1: 2.0 μs Pulse width, f=1.0KHz

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	PACKAGE	PACKING
TSF2080C	C0	ITO-220AB	50 / Tube

EXAMPLE

PREFERRED P/N	PART NO.	PACKING CODE	DESCRIPTION
TSF2080C C0	TSF2080C	C0	

RATINGS AND CHARACTERISTICS CURVES

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

FIG.1 FORWARD CURRENT DERATING CURVE

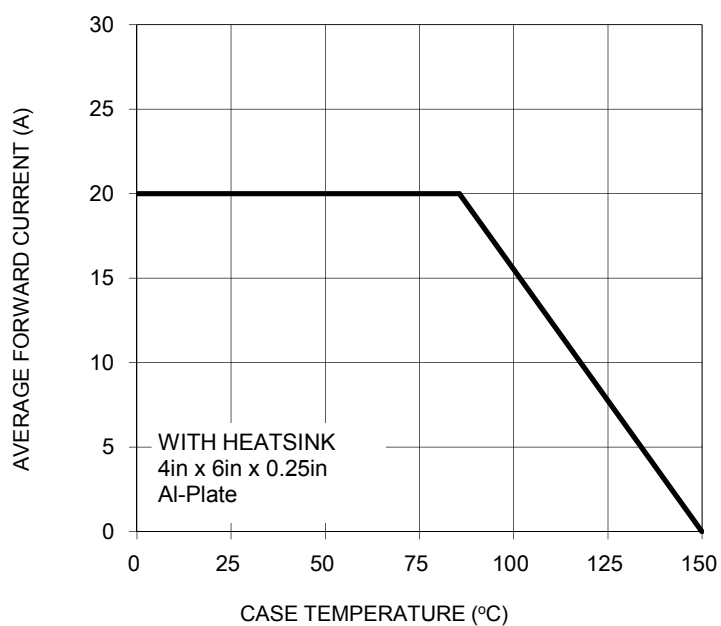


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

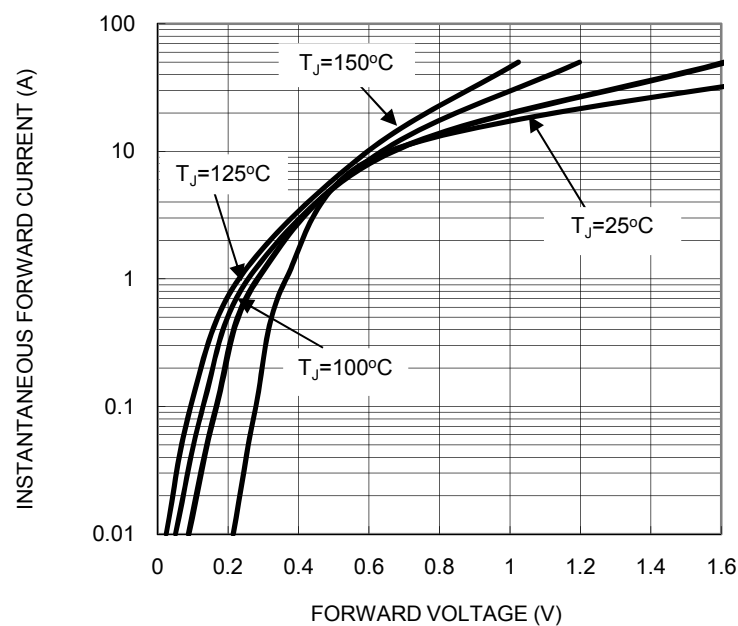


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

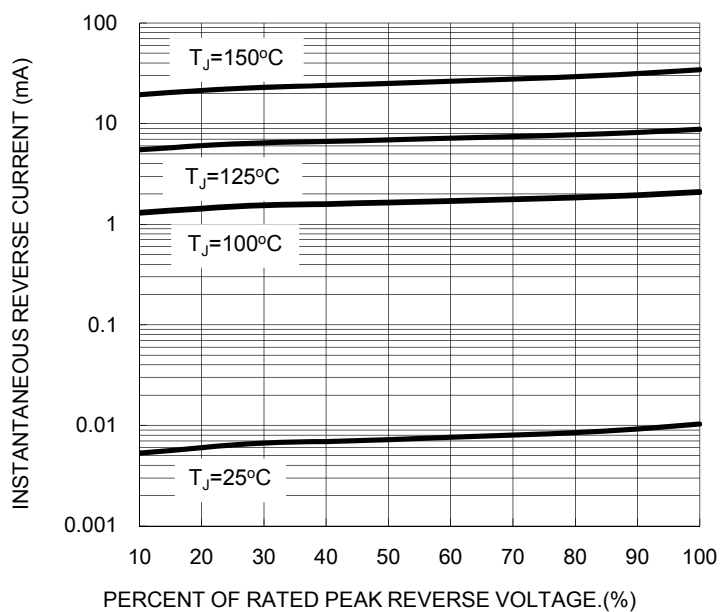
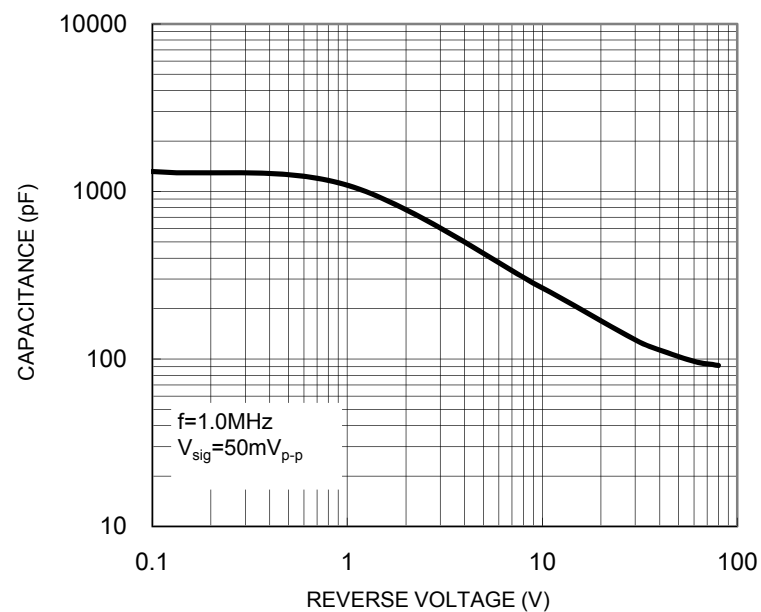
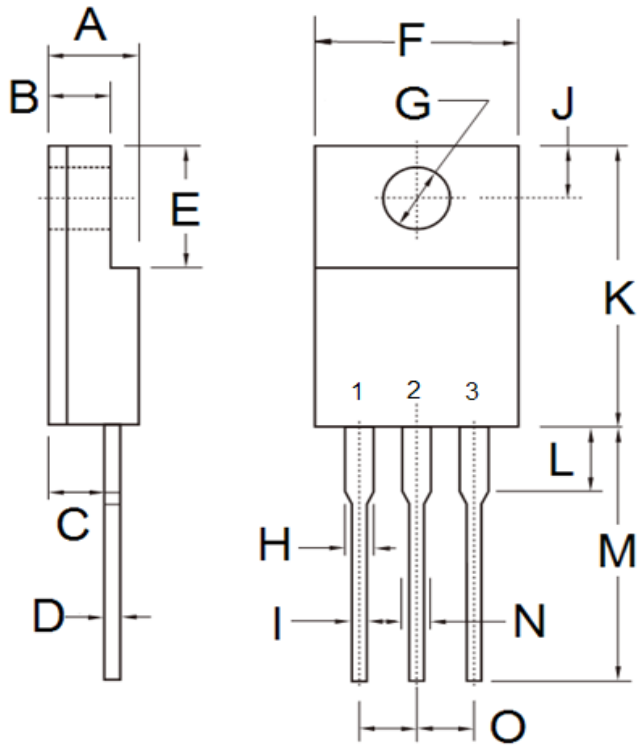


FIG. 4 TYPICAL JUNCTION CAPACITANCE

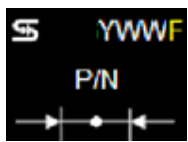


PACKAGE OUTLINE DIMENSIONS



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	-	1.80	-	0.071
O	2.41	2.67	0.095	0.105

MARKING DIAGRAM



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