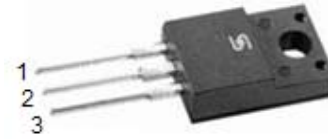


Dual High-Voltage Trench Schottky Rectifier

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, UL flammability classification rating 94V-0

Packing code with suffix "G" means green compound (halogen-free)

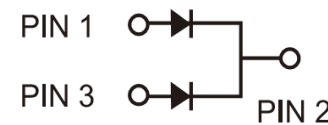
Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: As marked

Mounting torque: 0.56 Nm Max.

Weight: 1.7g (approximately)



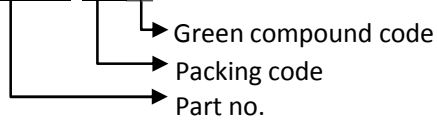
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T _A =25°C unless otherwise noted)							
PARAMETER		SYMBOL	TSF20U80C			UNIT	
Maximum repetitive peak reverse voltage		V _{RRM}	80			V	
Maximum average forward rectified current	per device	I _{F(AV)}	20			A	
	per diode		10				
Peak forward surge current, 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 =1.0mA)		V _{BR}	MIN.	TYP.	MAX.	V	
			80	-	-		
Instantaneous forward voltage per diode (Note 2)	I _F = 5A	T _J = 25°C	V _F	-	0.52	-	V
	I _F = 10A			-	0.67	0.77	
	I _F = 5A	T _J = 125°C	V _F	-	0.48	-	
	I _F = 10A			-	0.62	0.70	
Instantaneous reverse current per diode at rated reverse voltage		T _J = 25°C	I _R	-	20	600	μA
		T _J = 125°C		-	10	20	mA
Typical thermal resistance		R _{θJC}	5			°C/W	
Operating junction temperature range		T _J	- 55 to +150			°C	
Storage temperature range		T _{STG}	- 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

ORDER INFORMATION (EXAMPLE)

TSF20U80C COG



RATINGS AND CHARACTERISTICS CURVES

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

FIG. 1 FORWARD CURRENT DERATING CURVE

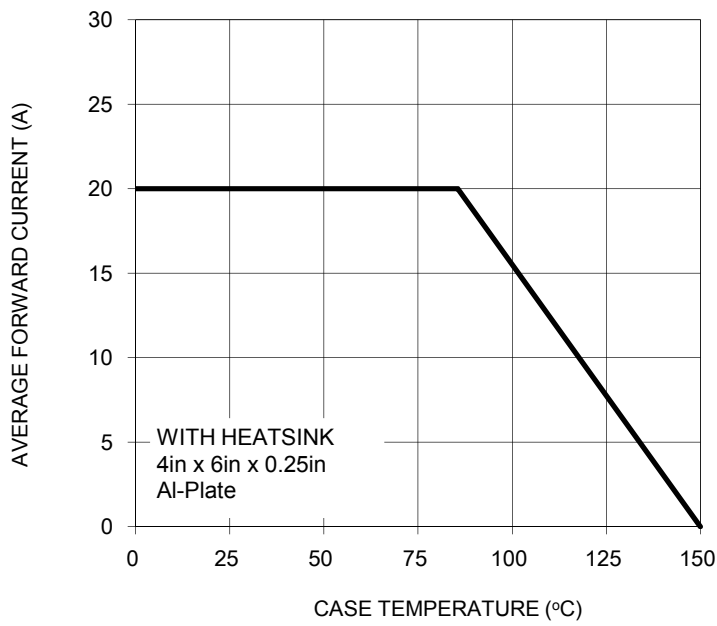


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

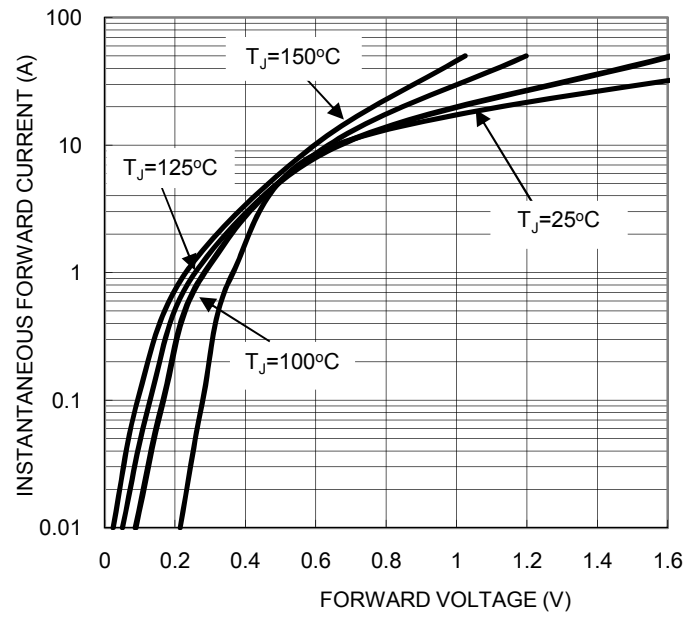


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

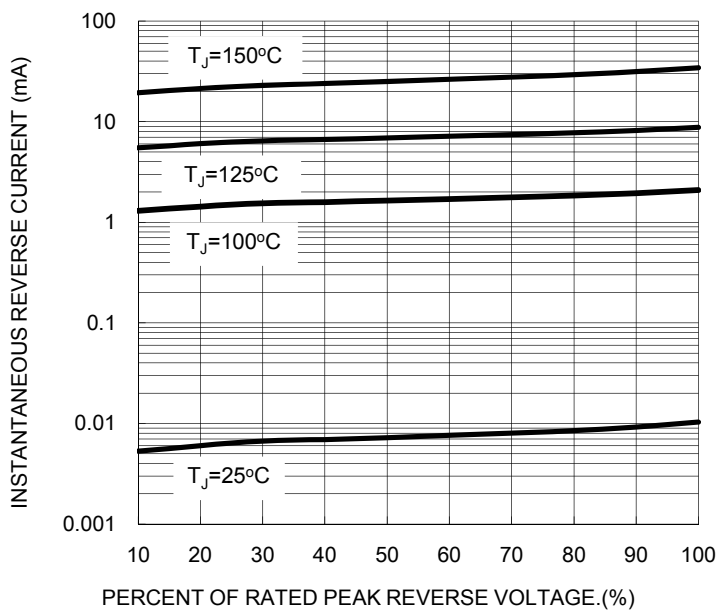
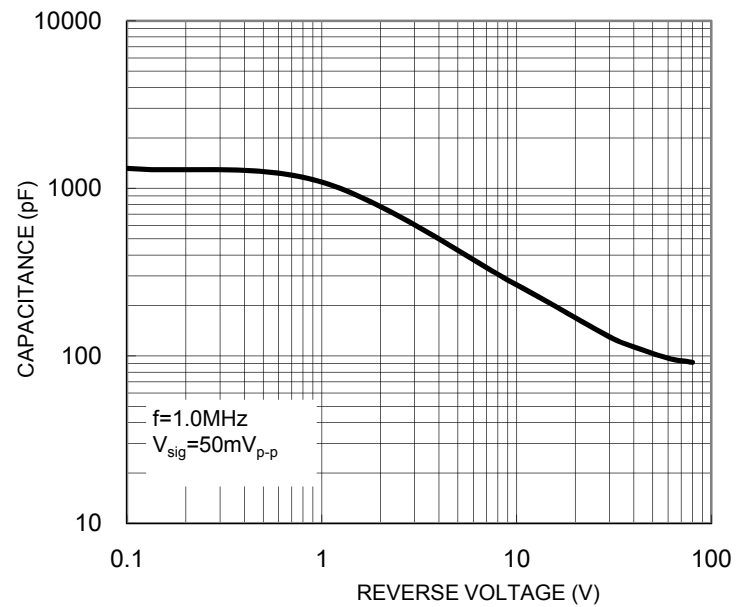
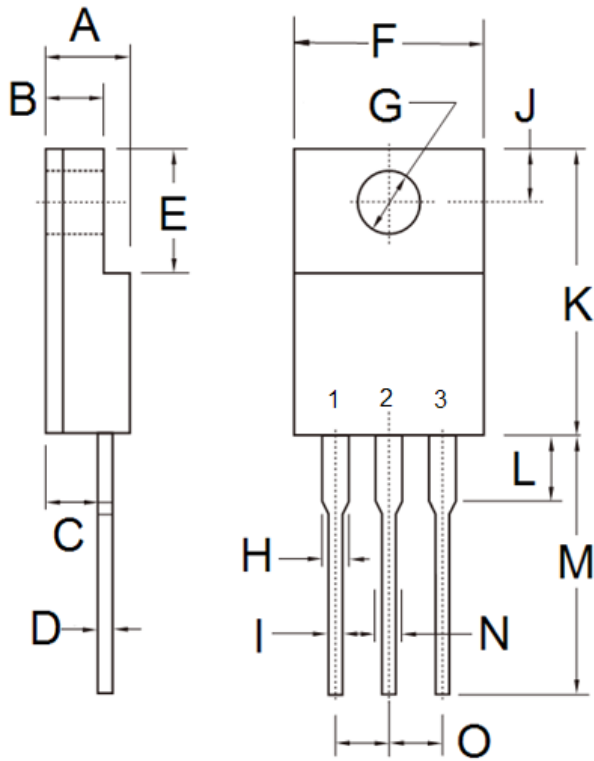


FIG. 4 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS
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

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