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FEATURES

- Trench MOS schottky barrier diode
- Low forward voltage drop
- Low profile typical body height 1.1 mm
- High temperature soldering guaranteed: 260°C/10 seconds
- RoHS compliant
- Halogen-free according to IEC 61249-2-21 definition



MECHANICAL DATA

- Case: TO-277B

- Case material: molding compound meets UL 94V-0 flammability rating

TYPICAL APPLICATION

General purpose use in AC to DC wave rectification for SMPS, lighting, adapter, charger, home appliance, office equipment and telecommunication.

MAXIMUM RATINGS

T_A=25℃ unless otherwise noted

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Parameter	Symbol	Value			
Repetitive Peak Reverse Voltage	V_{RRM}	150	V		
Average Forward Rectified Current	I _{F(AV)}	15	Α		
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load) I _{FSM} 250		250	А		
Operating Junction Temperature Range	T _J	-55 to +150	$^{\circ}$		
Storage Temperature Range	T _{STG}	-55 to +150	$^{\circ}$		

ELECTRICAL CHARACTERISTICS

T_A=25°C unless otherwise noted

Parameter	Test Conditions	Symbol	Value		Unit
			Тур.	Max.] UIIII
Forward Voltage@I _F =3A	T _A =25℃	V _F	0.61	0.64	V
	T _A =125℃		0.55	0.58	
Forward Voltage @L =15A	T _A =25℃		0.8	0.83	
Forward Voltage@I _F =15A	T _A =125℃		0.72	0.75	
Reverse Current @ V _{RRM}	T _A =25℃	I _R	10	50	uA
	T _A =125℃		6	35	mA
Typical Thermal Resistance (junction to ambient)		R _{eJA}	102		℃W



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RATINGS AND CHARACTERISTIC CURVES

T_A=25℃ unless otherwise noted

FIG.1: Forward Output Current Derating Curve

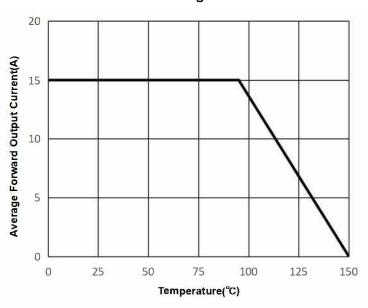


FIG.2: Maximum Non-Repetitive Peak Forward Surge Current

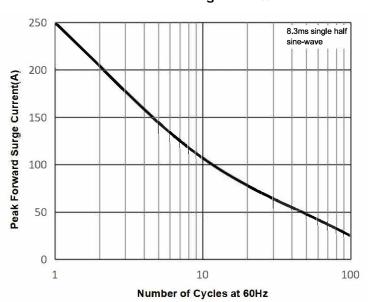


FIG.3: Typical Forward Characteristics

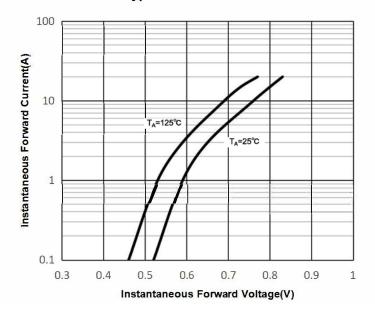
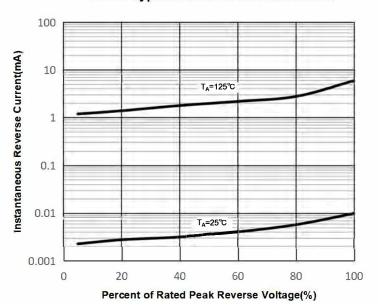


FIG.4: Typical Reverse Characteristics



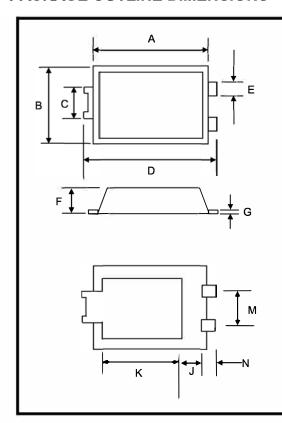


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PACKAGE OUTLINE DIMENSIONS



	_	TO-277B		
DIM.	INCHES		MM	
	MIN	MAX	MIN	MAX
Α	0.220	0.228	5.60	5.80
В	0.161	0.169	4.10	4.30
С	0.067	0.075	1.70	1.90
D	0.252	0.260	6.40	6.60
Е	0.031	0.039	0.80	1.00
F	0.041	0.047	1.05	1.20
G	0.012	0.016	0.30	0.40
J	0.043	0.055	1.10	1.40
K	0.139(typ.)		3.52(typ.)	
M	0.073(typ.)		1.86(typ.)	
N	0.033	0.043	0.85	1.10

PACKING INFORMATION

Package	Reel(PCS)	Inner Box(PCS)	Carton(PCS)
TO-277B	5,000	10,000	80,000



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15A, 150V Low Forward Voltage Schottky Rectifier

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