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# FEATURES

- Planar 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

 $T_A{=}25^\circ\!\!{\rm C}$  unless otherwise noted

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	200	V
Average Forward Rectified Current	I <sub>F(AV)</sub>	5	Α
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	140	A
Operating Junction Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

# **ELECTRICAL CHARACTERISTICS**

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

Parameter	Test Conditions	Symbol	Value		Unit
			Тур.	Max.	
Forward Voltage@I <sub>F</sub> =5A	T <sub>A</sub> =25℃	V <sub>F</sub>	0.78	0.81	v
	T <sub>A</sub> =125℃	۷F	0.66	0.69	V
Reverse Current @ V <sub>BRM</sub>	T <sub>A</sub> =25℃	I <sub>R</sub>	1	10	uA
	T <sub>A</sub> =125℃		0.6	5	mA
Typical Thermal Resistance (junction to ambient)		R <sub>eja</sub>	102		℃/W

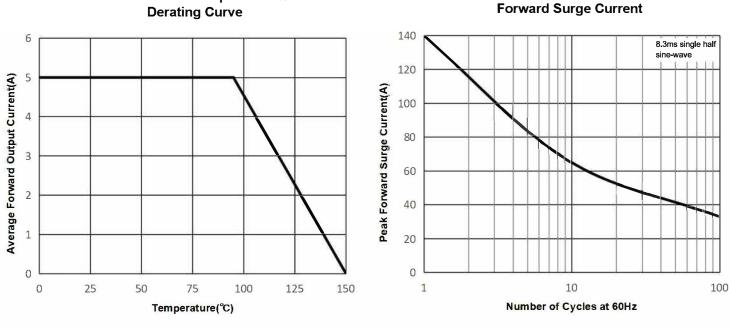


**REV.E(3)** 

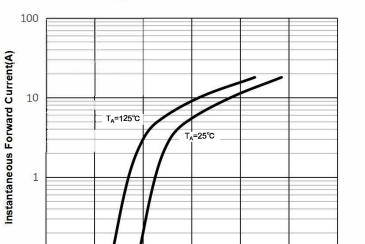


#### **RATINGS AND CHARACTERISTIC CURVES**

T<sub>A</sub>=25℃ unless otherwise noted







0.8

Instantaneous Forward Voltage(V)

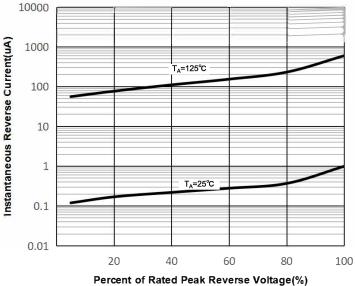
1

1.2

1.4

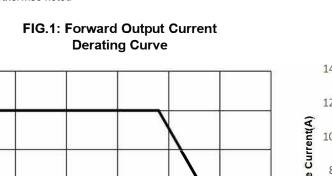
FIG.4: Typical Reverse Characteristics

FIG.2: Maximum Non-Repetitive Peak





REV.E(3)



0.4

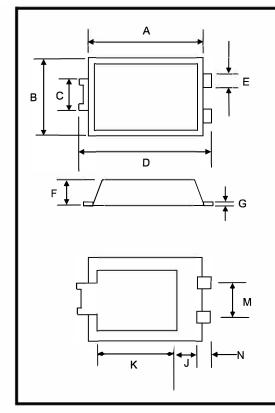
0.6

0.1

0.2



## PACKAGE OUTLINE DIMENSIONS



		TO-277B		
DIM.	INC	HES	MM	
	MIN	MAX	MIN	MAX
А	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
к	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)
ТО-277В	5,000	10,000	80,000



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DISCLAIMER

1. Above specification may be changed without notice. MHCHXM will reserve authority on material change for above specification.

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REV.E(3