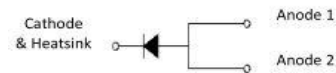


### FEATURES

- 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 rectification for SMPS, lighting, adapter, charger, home appliance, office equipment and telecommunication.

### MAXIMUM RATINGS

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	150	V
Average Forward Rectified Current	$I_{F(AV)}$	20	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	$I_{FSM}$	320	A
Operating Junction Temperature Range	$T_J$	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$

### ELECTRICAL CHARACTERISTICS

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

Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@ $I_F=20\text{A}$	$T_A=25^{\circ}\text{C}$	$V_F$	0.8	0.85	V
	$T_A=125^{\circ}\text{C}$		0.72	0.77	
Reverse Current @ $V_{RRM}$	$T_A=25^{\circ}\text{C}$	$I_R$	10	50	$\mu\text{A}$
	$T_A=125^{\circ}\text{C}$		5	35	mA



## RATINGS AND CHARACTERISTIC CURVES

FIG.1: Forward Output Current Derating Curve

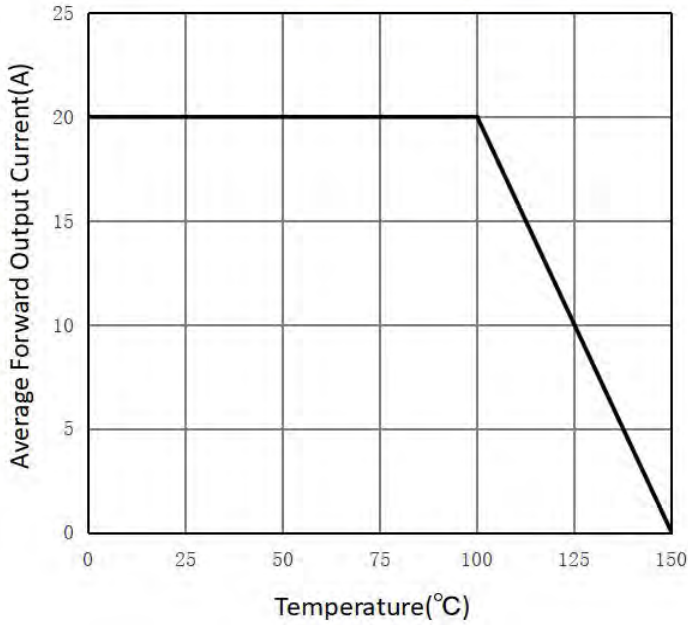


FIG.2: Maximum Non-Repetitive Peak Forward Surge Current

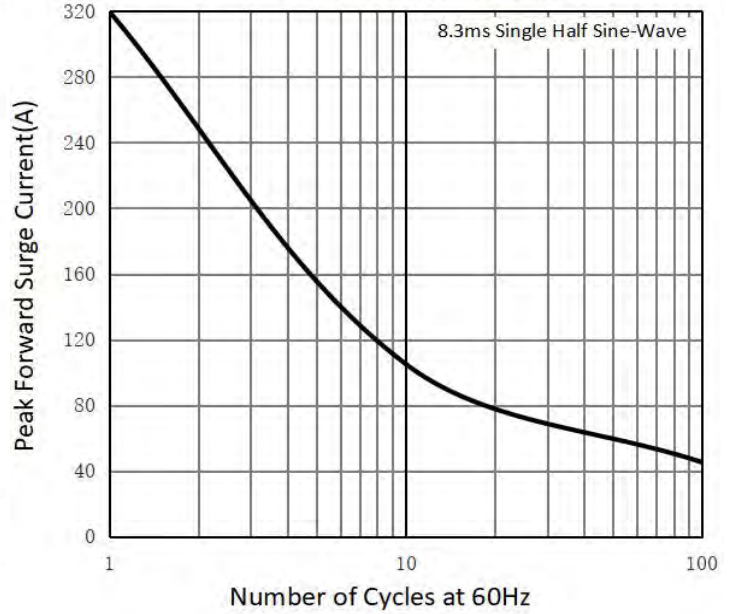


FIG.3: Typical Forward Characteristics

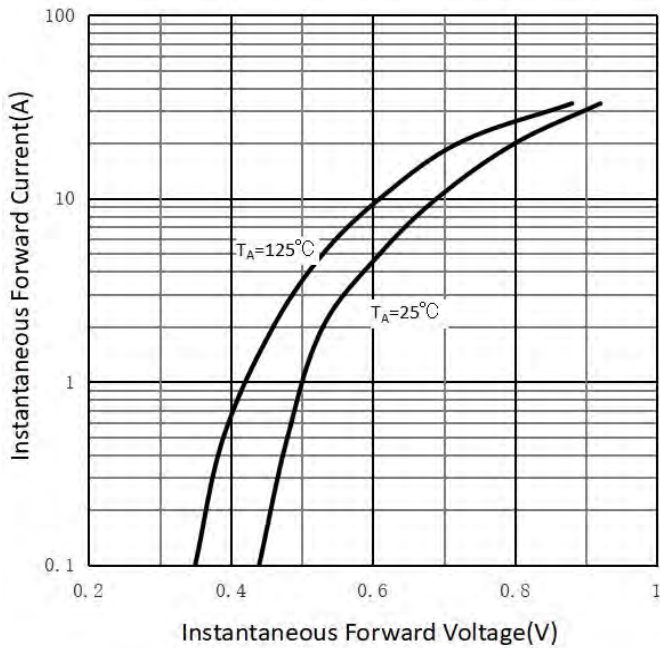
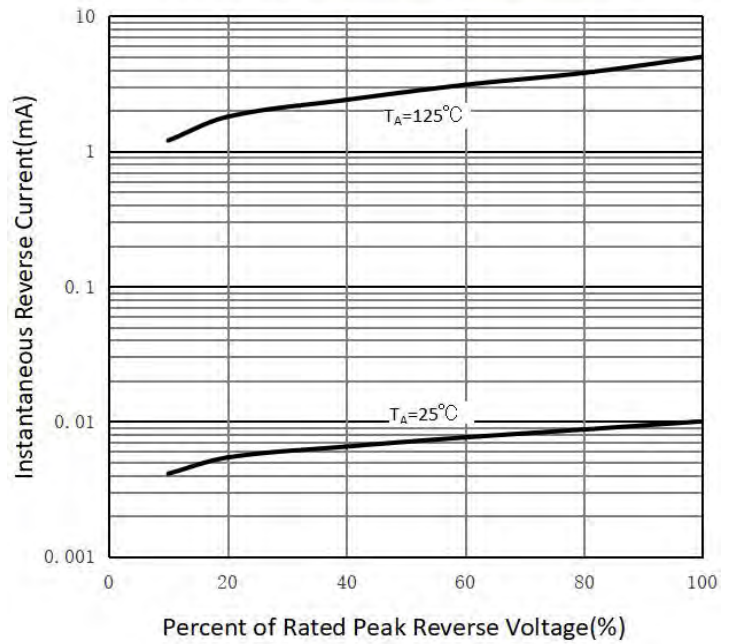
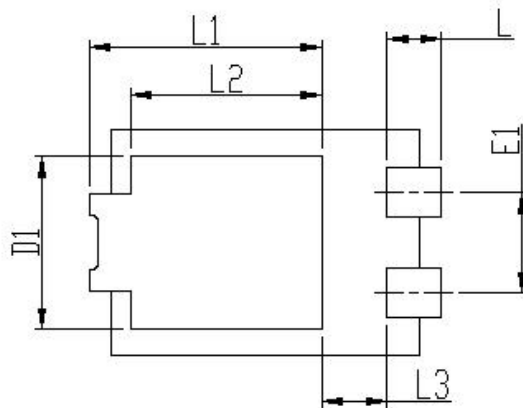
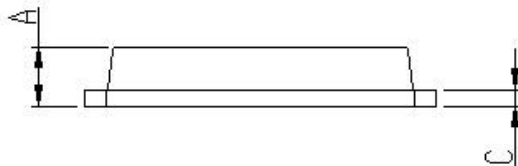
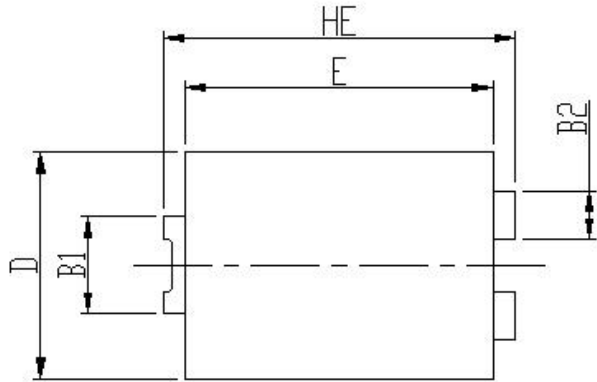


FIG.4: Typical Reverse Characteristics



**PACKAGE OUTLINE DIMENSIONS**



DIM	Unit:mm		Unit:inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52Typ.		0.139Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86Typ.		0.073Typ.	

**PACKING INFORMATION**

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



**DISCLAIMER**

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2. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
3. When using this product, please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. MHCHXM assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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