

Features

- Halogen Free. "Green" Device (Note 1)
- Low Forward Voltage Drop
- Super Long Operating Life
- Lead Free Finish/RoHS Compliant(Note 2)("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance(Note 3): 73°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR10100ULPS	10100U	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

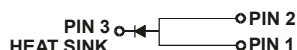
Average Forward Current	$I_{F(AV)}$	10A	$T_A = 140^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, Half Sine
Forward Voltage	V_F	0.7V(Max) 0.57V(Typ) 0.63V(Max) 0.82V(Max)	$I_F=10A \quad T_J = 25^{\circ}\text{C}$ $I_F=10A \quad T_J = 125^{\circ}\text{C}$ $I_F=20A \quad T_J = 25^{\circ}\text{C}$
Reverse Current	I_R	0.5mA(Max) 25mA(Max)	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

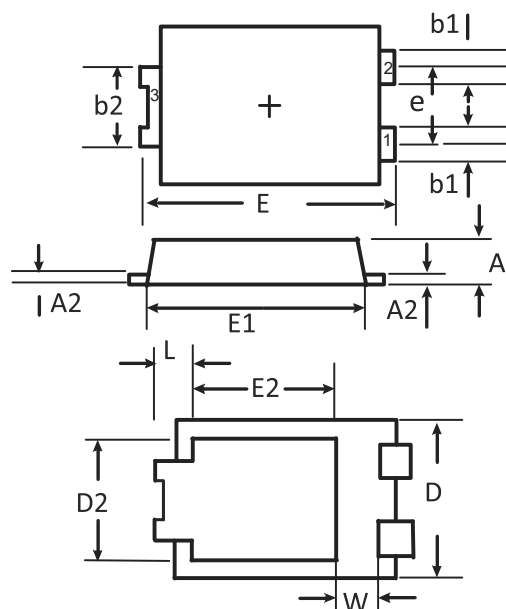
3. FR-4 PCB, 2oz. Copper.

Internal Structure



**10 Amp Low VF
Schottky Barrier
Rectifier
100 Volts**

TO-277B



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.039	0.047	1.00	1.20	
A2	0.006	0.017	0.15	0.43	
b1	0.030	0.041	0.75	1.05	
b2	0.065	0.077	1.65	1.95	
D	0.148	0.169	3.75	4.30	
D2	0.110	0.126	2.80	3.20	
E	0.250	0.264	6.35	6.70	
e	0.065	0.077	1.65	1.95	
E1	0.207	0.228	5.25	5.80	
E2	0.120	0.142	3.05	3.60	
L	0.028	0.051	0.70	1.30	
W	0.031	0.056	0.80	1.42	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

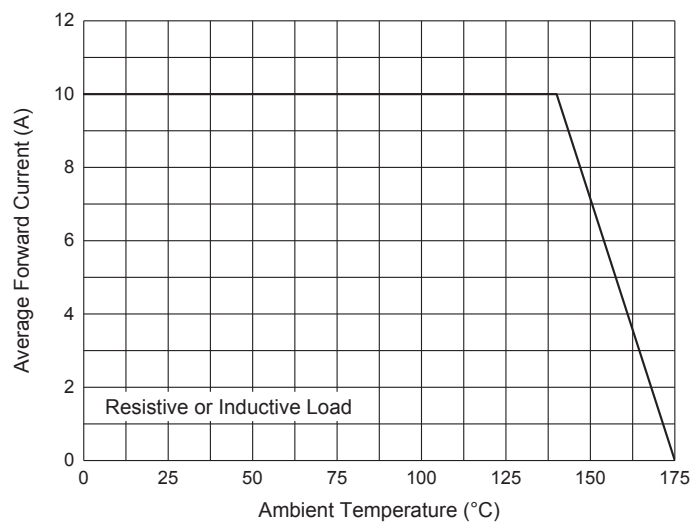


Fig. 2 - Typical Instantaneous Forward Characteristics

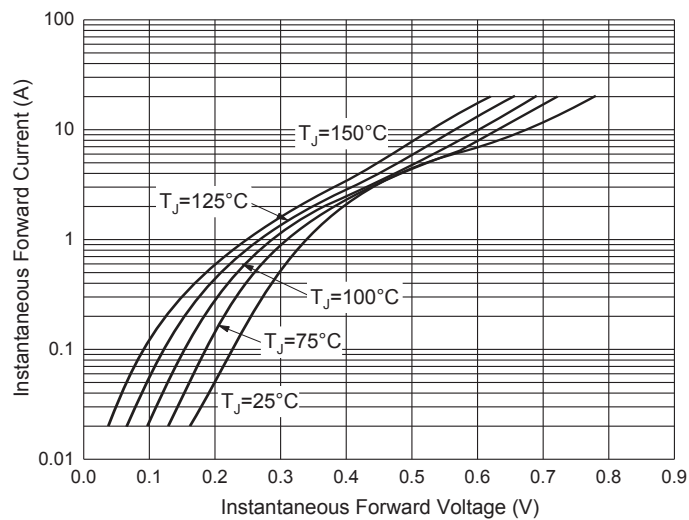
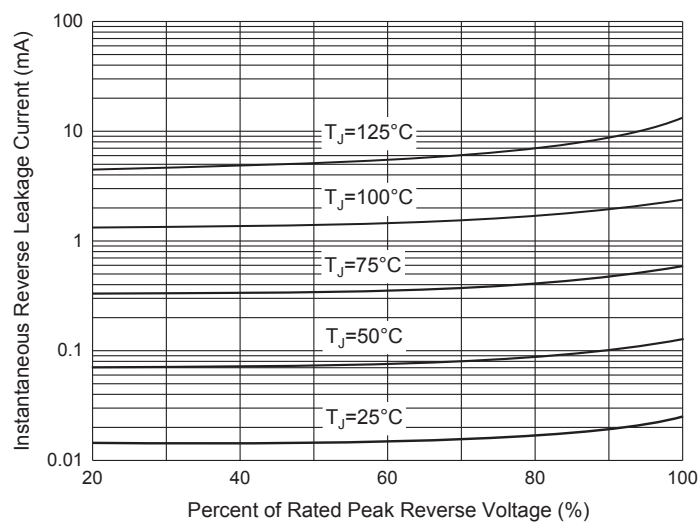


Fig. 3 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel

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