

### Features

- Halogen Free. "Green" Device (Note 1)
- High Surge Forward Current Capability
- Low Power Loss, High Efficiency
- 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 +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 8.0 °C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MBR15U150	15U150	150V	105V	150V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

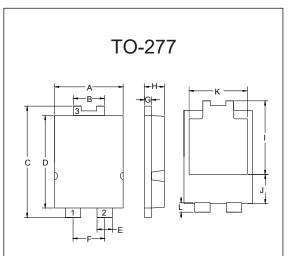
Average Forward Current	I <sub>F(AV)</sub>	15A	Tc = 60°C		
Peak Forward Surge Current	I <sub>FSM</sub>	250A	8.3ms,Half Sine		
Forward Voltage	V <sub>F</sub>	0.80V(Typ) 0.84V(Max) 0.68V(Typ) 0.73V(Max)	I <sub>F</sub> =15A T <sub>J</sub> =25⁰C I <sub>F</sub> =15A T <sub>J</sub> =125⁰C		
Reverse Current	I <sub>R</sub>	10uA(Max) 2mA(Max)	V <sub>R</sub> =150; T <sub>J</sub> =25⁰C V <sub>R</sub> =150; T <sub>J</sub> =125⁰C		
Typical Junction Capacitance	CJ	310pF	Measured at 1.0MHz V <sub>R</sub> =4.0V		
Current Squared Time	I <sup>2</sup> T	259 A²s	1ms≤t<8.3ms T <sub>J</sub> =25⁰C		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine,</li>
<900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.</li>
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

### **Internal Structure**

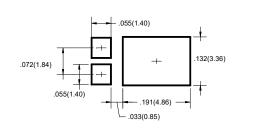
PIN 3 0-14 OPIN 2 HEAT SINK OPIN 1





	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.154	0.161	3.90	4.10		
В	0.067	0.075	1.70	1.90		
С	0.252	0.260	6.40	6.60		
D	0.209	0.217	5.30	5.50		
E	0.031	0.039	0.80	1.00		
F	0.071	0.075	1.80	1.90		
G	0.014	0.018	0.35	0.45		
Н	0.043	0.047	1.10	1.20		
I	0.161	0.177	4.10	4.50		
J	0.059	0.075	1.50	1.90		
K	0.114	0.134	2.90	3.40		
L	0.022	0.030	0.55	0.75		

#### Suggested Solder Pad Layout







# **Curve Characteristics**

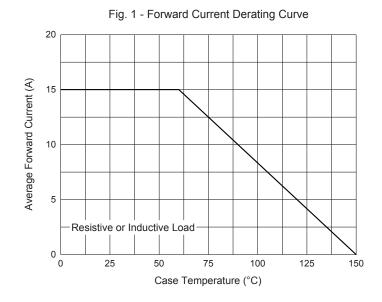
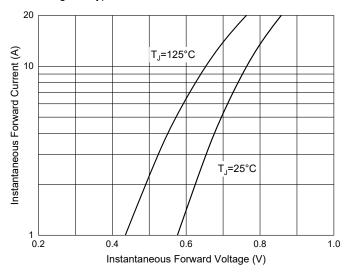


Fig. 3 - Typical Instantaneous Forward Characteristics



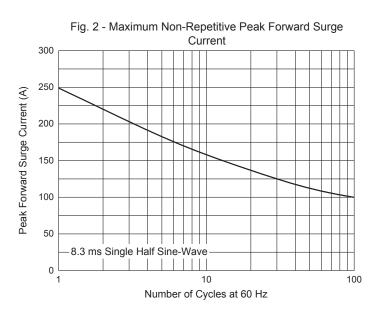
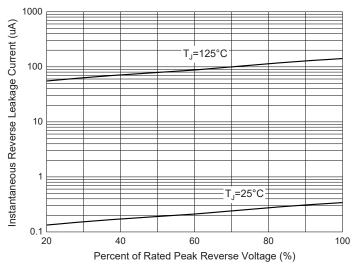


Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 4Kpcs/Reel	

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