

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**Micro Commercial Components** 



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## MBR1550ULPS

# **15 Amp** Rectifier

# **Schottky Barrier** 50 Volts

# TO-277B b2 D2 OPIN 2 PIN 3 o⊣◀ oPIN 1 **HEAT SINK**

	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.039	.047	1.00	1.20	
A2	.006	.017	0.15	0.43	
b1	.030	.041	0.75	1.05	
b2	.065	.077	1.65	1.95	
D	.148	.169	3.75	4.30	
D2	.110	.126	2.80	3.20	
Е	.250	.264	6.35	6.70	
е	.065	.077	1.65	1.95	
E1	.207	.228	5.25	5.80	
E2	.120	.142	3.05	3.60	
L	.028	.051	0.70	1.30	
W	.031	.056	0.80	1.42	

### **Features**

Halogen free available upon request by adding suffix "-HF"

- Low forward voltage drop
- Super long operating life
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1550ULPS	1550U	50V	35V	50V

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

Average Forward Current	I <sub>F(AV)</sub>	15A	T <sub>L</sub> = 125°C
Peak Forward Surge Current	I <sub>FSM</sub>	320A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V <sub>F</sub>	.47V .41V	I <sub>F</sub> =15A; T <sub>a</sub> =25°C I <sub>F</sub> =15A; T <sub>a</sub> =125°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.3mA 15mA	T <sub>J</sub> =25°C T <sub>J</sub> =100°C
Maximum thermal Resistance	RthJA	73°C/W 31°C/W	(Note 2) (Note 3)

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7. 2.FR-4 PCB,2oz,Copper

3.Polymide PCB,2oz Copper Cathode pad dimensions 18.8mmx14.4mm Anode pad dimensions 5.6mmx14.4mm.



#### ■ Rating and characteristic curves

Fig. 1 - Forward Power Dissipation

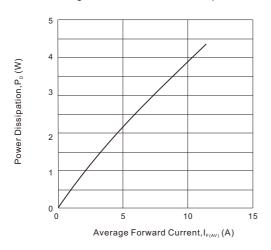


Fig. 3 - Reverse Characteristics

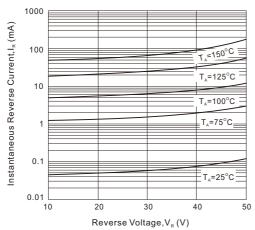


Fig. 5 - Total Capacitance VS. Reverse Voltage

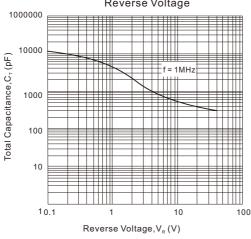


Fig. 2 - Instantaneous Forward Characteristics

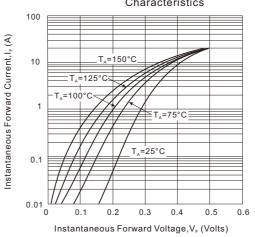


Fig.4 - Forward Current Derating Curve

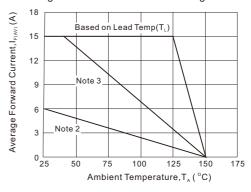
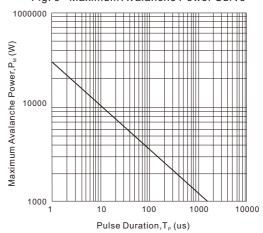


Fig. 6 - Maximum Avalanche Power Curve





### **Ordering Information**

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

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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