

**Micro Commercial Components** 

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### **MBR15U100**

## **15 Amp** Rectifier

# **Schottky Barrier** 100 Volts

# **TO-277** E1

DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.041	.045	1.05	1.15	
A2	.010	.014	0.25	0.35	
b1	.031	.039	0.80	1.00	
b2	.067	.075	1.70	1.90	
D	.154	.161	3.90	4.10	
Е	.252	.260	6.40	6.60	
E1	.205	.215	5.20	5.40	
е	.071	.075	1.80	1.90	

PIN 3 O ★ HEAT SINK

OPIN 2

#### **Features**

- Halogen free available upon request by adding suffix "-HF"
- High surge Forward current capability
- Low Power loss, High efficiency
- 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
MBR15U100	15U100	100V	70V	100V

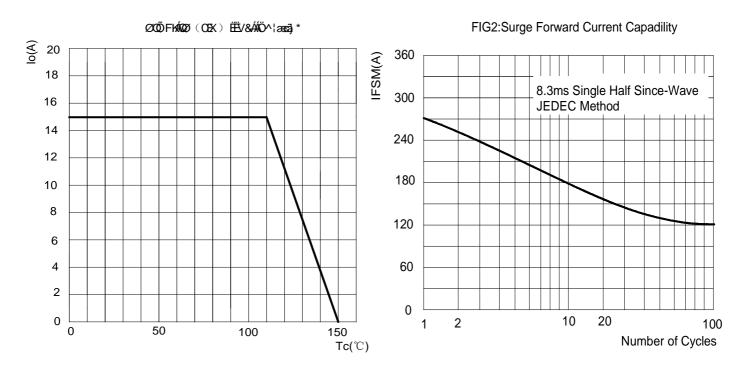
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

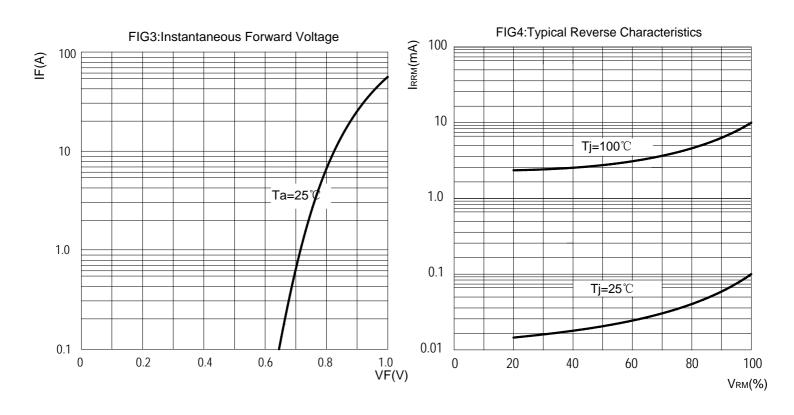
Average Forward Current	I <sub>F(AV)</sub>	15A		$T_{\rm C} = 110^{\circ} {\rm c}$		
Peak Forward Surge Current	I <sub>FSM</sub>	275A		8.3ms, half sine		
		Min.	Тур.	Max.		
Forward Voltage	$V_{F}$		0.80V 0.75V	0.85V 0.80V	I <sub>F</sub> =15A I <sub>F</sub> =15A	TJ=25°C TJ=125°C
Reverse Current	I <sub>R</sub>			0.1mA 10mA	V <sub>R</sub> =100 V <sub>R</sub> =100	TJ=25°C TJ=125°C
Reverse Breakdown Voltage	$V_{BR}$	100V			I <sub>R</sub> =0.5m	А
Current Squared Time	l²t	313 A <sup>2</sup> s		1ms≤t<8.3ms Tj=25℃		
Typical Thermal Resistance	R <sub>θJC</sub>	8.0 ℃/W				

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.



#### Characteristics(Typical)







#### **Ordering Information**

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

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

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