



# **Schottky Diodes**



- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C



Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

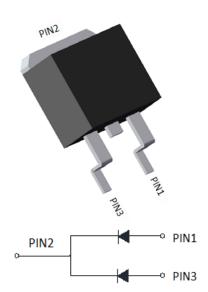
#### **Mechanical Data**

• Package: TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

• Terminals: Tin plated leads, solderable per J-STD-

002 and JESD22-B102
• Polarity: As marked



■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBRB1060CT		
Device marking code			MBRB1060CT		
Repetitive Peak Reverse Voltage	VRRM	٧	60		
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25℃	Ю	Α	10		
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a$ =25 $^{\circ}$ C	IFSM	Α	120		
Current Squared Time @1ms≤t<8.3ms Tj=25°C,	l <sup>2</sup> t	A <sup>2</sup> s	60		
Storage Temperature	T <sub>stg</sub>	$^{\circ}$	-55 ~ <b>+</b> 150		
Junction Temperature	Tj	$^{\circ}$	-55 ~ <b>+</b> 150		

**■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBRB1060CT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=5.0A	0.72
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM T <sub>a</sub> =25°C	0.2
	IRRM2		VRM=VRRM T <sub>a</sub> =125°C	50



## MBRB1060CT

### **■Thermal Characteristics** $(T_a=25$ $^{\circ}$ C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MBRB1060CT
Thermal Resistance	Between junction and case	R <sub>θJ-C</sub>	°CMV	2.0

**■Ordering Information** (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBRB1060CT	Approximate 1.43	50	2000	8000	Tube
MBRB1060CT	Approximate 1.43	1000	2000	10000	Reel

#### **■Characteristics** (Typical)

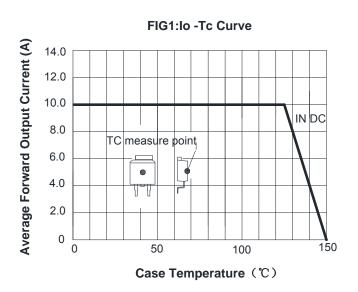
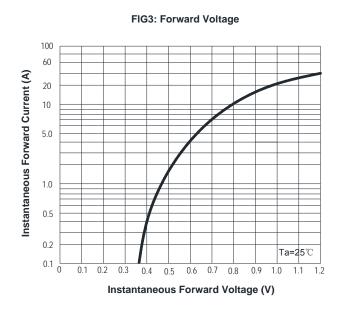
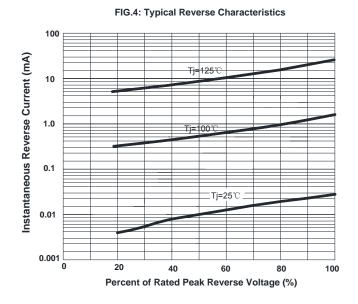


FIG2:Surge Forward Current Capability 140 Peak Forward Surge Current (A) 120 100 8.3ms Single Half Sine-Wave 80 JEDEC Method 60 40 20 2 5 20 50 100 **Number of Cycles** 

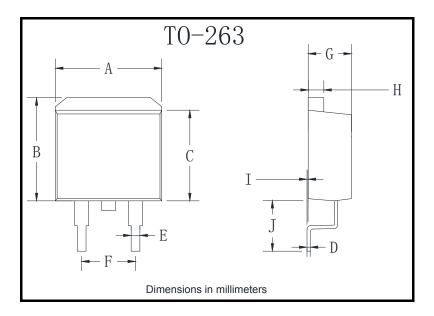






### MBRB1060CT

#### **■Outline Dimensions**



TO-263				
Dim	Min	Max		
Α	9.5	11.5		
В	9.7	10.5		
С	8.4	9.0		
D	0.28	0.64		
Е	0.68	0.94		
F	4.55	5.6		
G	4.04	5.10		
Н	1.14	1.4		
I	0	0.2		
J	4.9	6.05		

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