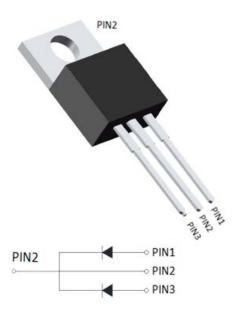




# **Schottky Diodes**



### **Features**

- High frequency operation
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### **Typical Applications**

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

### **Mechanical Data**

• Package: TO-220AB

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)

-maximum ratings ( a = s = sines sines specimen)					
PARAMETER	SYMBOL	UNIT	MBRL1060CT		
Device marking code			MBRL1060CT		
Repetitive Peak Reverse Voltage	VRRM	V	60		
Average Rectified Output Current @60Hz sine wave, R-load, $T_a$ =25 $^{\circ}$ C	Ю	Α	10		
Surge(Non-repetitive)Forward Current @ $60H_Z$ half sine-wave, 1 cycle, $T_a$ =25 $^{\circ}$ C	IFSM	Α	100		
Current Squared Time @1ms≤t≤8.3ms Tj=25°C	l <sup>2</sup> t	A <sup>2</sup> s	41		
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	MBRL1060CT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=5.0A	0.6
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM T <sub>a</sub> =25℃	0.2
	IRRM2		VRM=VRRM T <sub>a</sub> =100°C	20

## MBRL1060CT

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

PARA	AMETER	SYMBOL	UNIT	MBRL1060CT
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
MBRL1060CT	Approximate 1.9	50	1000	5000	Tube

## **■Characteristics** (Typical)

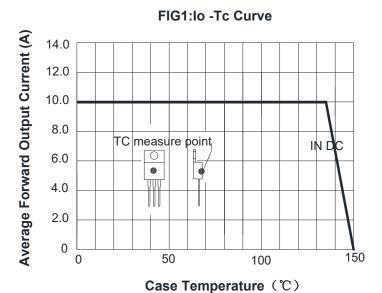


FIG2:Surge Forward Current Capability

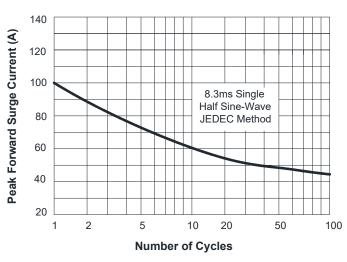


FIG3: Forward Voltage

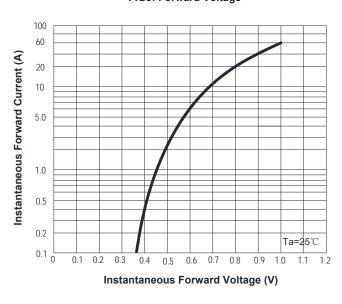
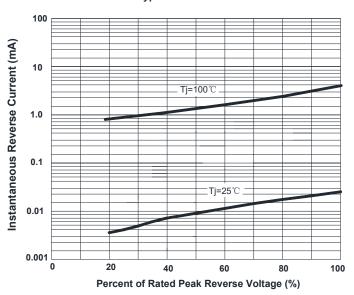


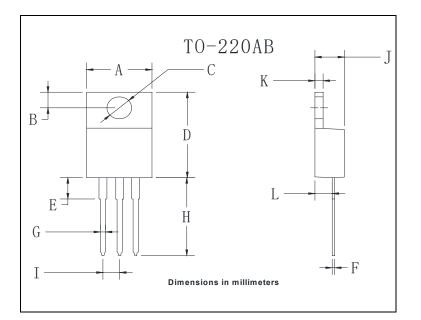
FIG.4: Typical Reverse Characteristics







## **■**Outline Dimensions



TO-220AB				
Dim	Min	Max		
Α	9.5	10.9		
В	2.22	3.27		
С	3.34	4.31		
D	14.5	15.5		
Е	3.16	4.46		
F	0.28	0.64		
G	0.68	0.94		
Н	13.06	14.62		
I	2.01	3.07		
J	4.04	5.1		
K	1.14	1.4		
L	2.14	3.19		



## MBRL1060CT

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