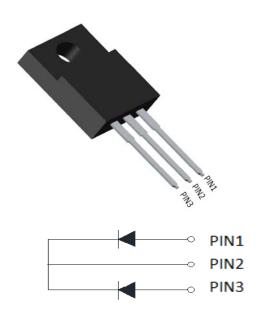




# **Schottky Diodes**



### **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: ITO-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)

PARAMETER	SYMBOL	UNIT	MBRL3060FCT	
Device marking code			MBRL3060FCT	
Repetitive Peak Reverse Voltage	VRRM	V	60	
Average Rectified Output Current @60Hz sine wave, R-load, Ta=25℃	Ю	Α	30	
Surge(Non-repetitive)Forward Current @ $60H_Z$ half sine-wave, 1 cycle, $T_a$ =25 $^{\circ}$ C	IFSM	Α	200	
Current Squared Time @1ms≤t<8.3ms Tj=25℃	l <sup>2</sup> t	A <sup>2</sup> s	167	
Storage Temperature	T <sub>stg</sub>	${\mathbb C}$	-55 ~ +150	
Junction Temperature	Tj	$^{\circ}$	-55 ~ +150	

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBRL3060FCT
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=15.0A	0.6
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM T <sub>a</sub> =25°C	0.5
	IRRM2		VRM=VRRM T <sub>a</sub> =85°C	20

## MBRL3060FCT

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

PAR	AMETER	SYMBOL	UNIT	MBRL3060FCT
Thermal Resistance	Between junction and case	R <sub>θJ-C</sub>	°C/W	4.0

**■Ordering Information** (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBRL3060FCT	Approximate 1.6	50	1000	5000	Tube

## **■Characteristics** (Typical)

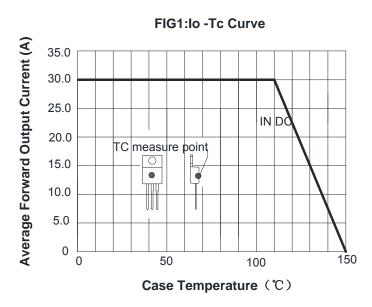


FIG2:Surge Forward Current Capability

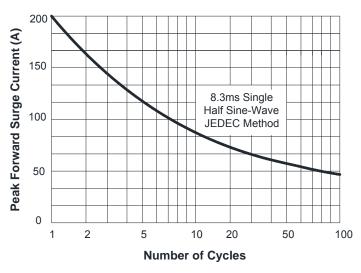


FIG3: Forward Voltage

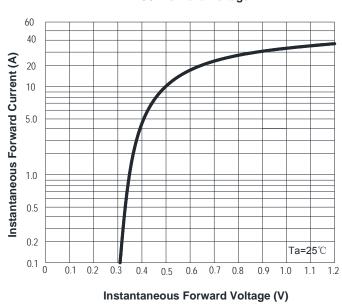
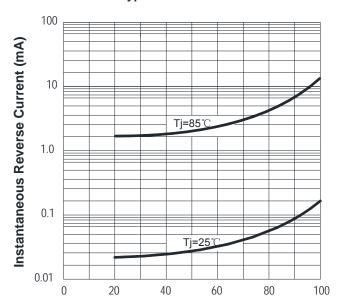


FIG.4: Typical Reverse Characteristics

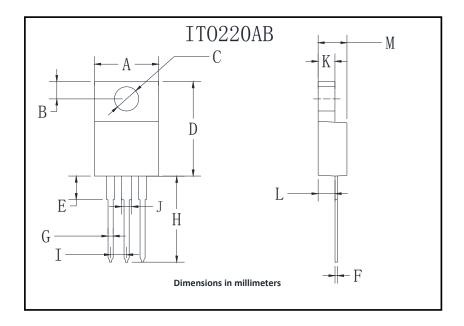


Percent of Rated Peak Reverse Voltage (%)

# MBRL3060FCT



### **■Outline Dimensions**



ITO-220AB					
Dim	Min	Max			
Α	9.7	10.7			
В	2.15	3.25			
С	2.6	3.8			
D	14.4	15.9			
Е	3.1	4.5			
F	0.4	0.8			
G	0.4	0.8			
Н	12.7	14.2			
1	1.80	2.95			
J	1.4	1.8			
K	2.1	3.56			
L	2.1	3.2			
М	3.9	5.1			

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