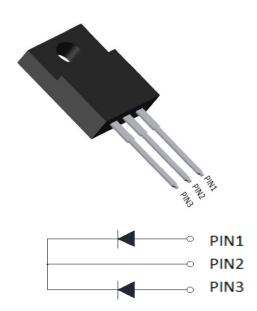


# **Schottky Diodes**



#### **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)

= Maximum Natings (1a=25 0 offices officer)					
PARAMETER	SYMBOL	UNIT	MBRL30200FCT		
Device marking code			MBRL30200FCT		
Repetitive Peak Reverse Voltage	VRRM	V	200		
Average Rectified Output Current @60Hz sine wave, R-load, Ta (FIG 1)	Ю	Α	30		
Surge(Non-repetitive)Forward Current @ $60H_Z$ half sine-wave, 1 cycle, $T_a$ =25 $^{\circ}$ C	IFSM	Α	220		
Current Squared Time @1ms≤t≤8.3ms Tj=25°C	l²t	A <sup>2</sup> s	200		
Storage Temperature	T <sub>Stg</sub>	$^{\circ}\!$	-55 ~ +150		
Junction Temperature	Tj	$^{\circ}\!$	-55 ~ <b>+</b> 150		

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBRL30200FCT
Maximum instantaneous forward voltage drop per diode	VFM	٧	IFM=15.0A	0.88
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM T <sub>a</sub> =25℃	0.1
	IRRM2		VRM=VRRM Ta=100°C	20

## lacktriangleThermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PAR	AMETER	SYMBOL	UNIT	MBRL30200FCT
Thermal Resistance	Between junction and case	R <sub>0J-C</sub>	°CMV	4.0

## **■Ordering Information** (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBRL30200FCT	Approximate 1.6	50	1000	5000	Tube

## **■Characteristics** (Typical)

FIG1:lo -Tc Curve

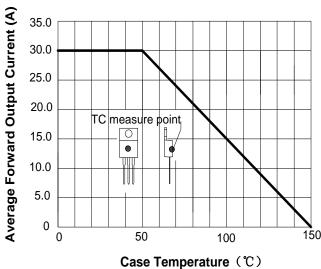


FIG2:Surge Forward Current Capability

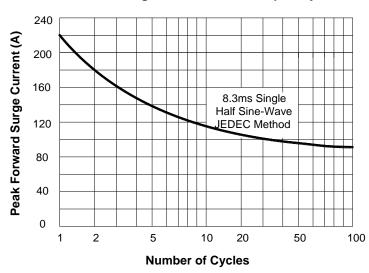


FIG3: Forward Voltage

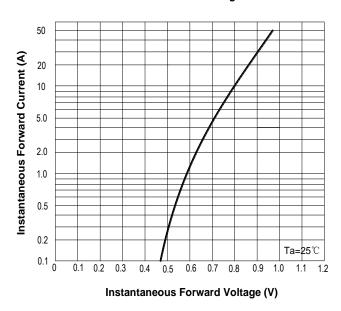
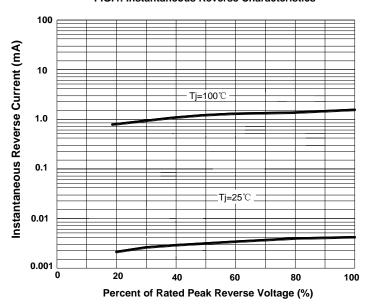
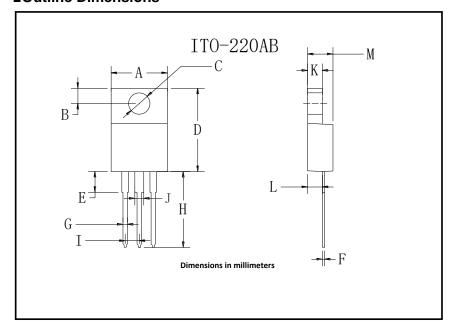


FIG.4: Instantaneous Reverse Characteristics





## **■**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		
I	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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