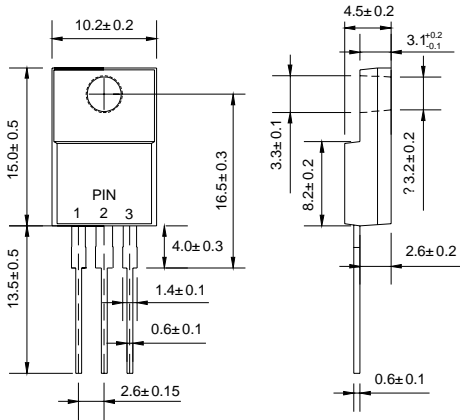




Diode Semiconductor Korea **MBR1020FCT THRU MBR10100FCT**  
**SCHOTTKY BARRIER RECTIFIER**

**ITO-220AB**



Dimensions in inches and (millimeters)

**FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

**MECHANICAL DATA**

**Case:** ITO-220AB molded plastic body  
**Terminals:** Leads solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Weight:** 0.080 ounce, 2.24 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	MBR 1040FCT	MBR 1045FCT	MBR 1050FCT	MBR 1060FCT	MBR 1080FCT	MBR 10100FCT	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	45	50	60	80	100	VOLTS	
Maximum RMS voltage	$V_{RMS}$	28	32	35	42	56	70	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	40	45	50	60	80	100	VOLTS	
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	10.0						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150.0						Amps	
Maximum instantaneous forward voltage at 5.0A	$V_F$	0.55		0.75		0.85		Volts	
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	$I_R$	1.0			50.0			mA	
Typical junction capacitance (NOTE 1)	$C_J$	550			450				pF
Typical thermal resistance (NOTE 2)	$R_{qjc}$	2.0						°C/W	
Operating junction temperature range	$T_J$	-65 to +125			-65 to +150				°C
Storage temperature range	$T_{STG}$	-65 to +150						°C	

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. Thermal resistance from junction to case

