

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **45.0** Volts  
FORWARD CURRENT - **10.0** Amperes

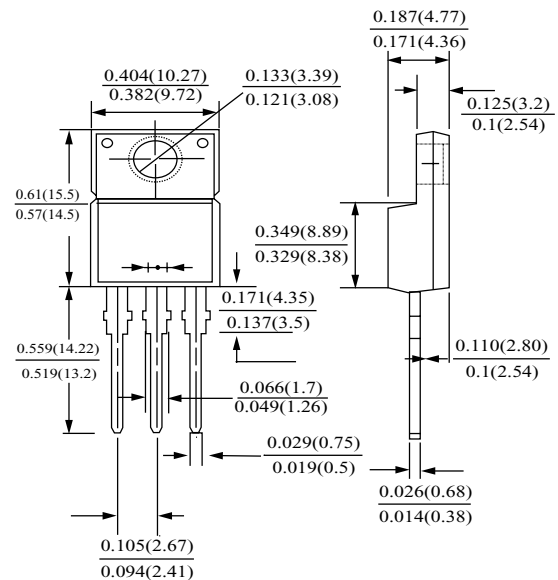
**FEATURES**

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

**MECHANICAL DATA**

- Case : ITO-220AB molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.689 grams
- Mounting position : Any

**ITO-220AB**



**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, derate current by 20%

PARAMETER	SYMBOL	MBR1045FCT	UNIT
Maximum repetitive peak reverse voltage	VRRM	45	V
Maximum RMS voltage	VRMS	32	V
Maximum DC blocking voltage	VDC	45	V
Maximum average forward rectified current Per leg	I <sub>F</sub>	10.0 5.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120.0	A
Maximum instantaneous I <sub>F</sub> =5A@25 @100	V <sub>F</sub>	0.70 0.60	V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	I <sub>R</sub>	0.1 10.0	mA
Typical Junction Capacitance	C <sub>J</sub>	270	pF
Typical Thermal Resistance	R <sub>JC</sub>	3	/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150	
Storage Temperature Range	T <sub>STG</sub>	-55 to +175	

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

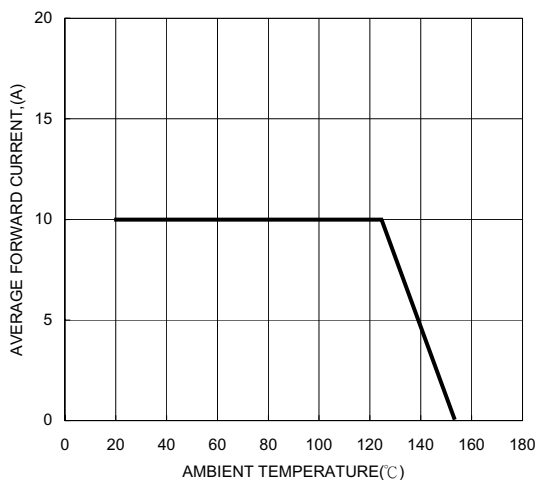


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

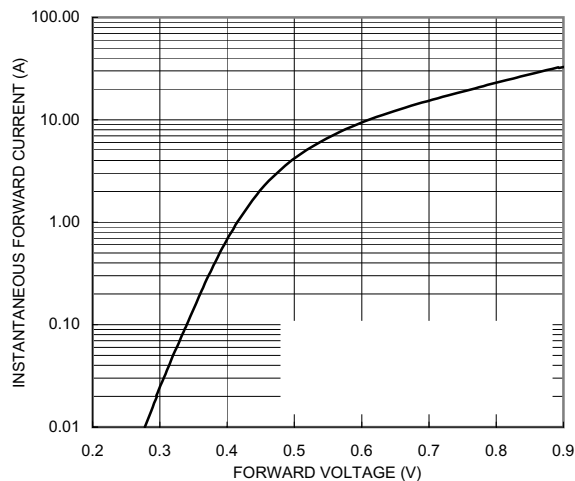


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

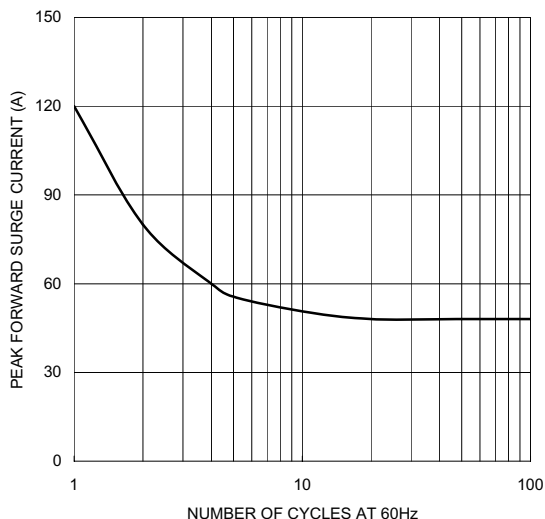


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

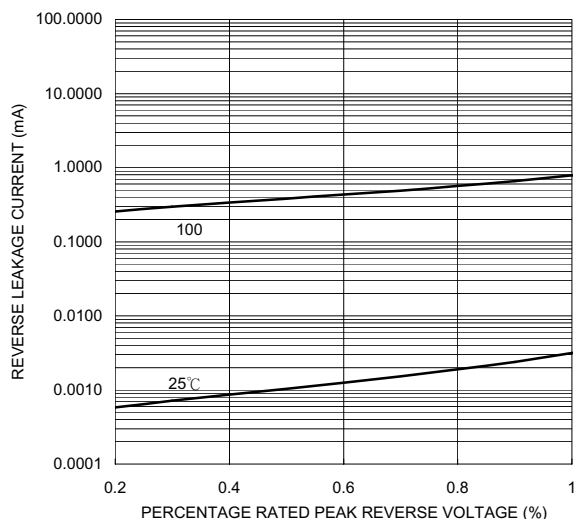


FIG. 5-TYPICAL JUNCTION CAPACITANCE

