



**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **20 to 200** Volts  
 FORWARD CURRENT - **30.0** Amperes

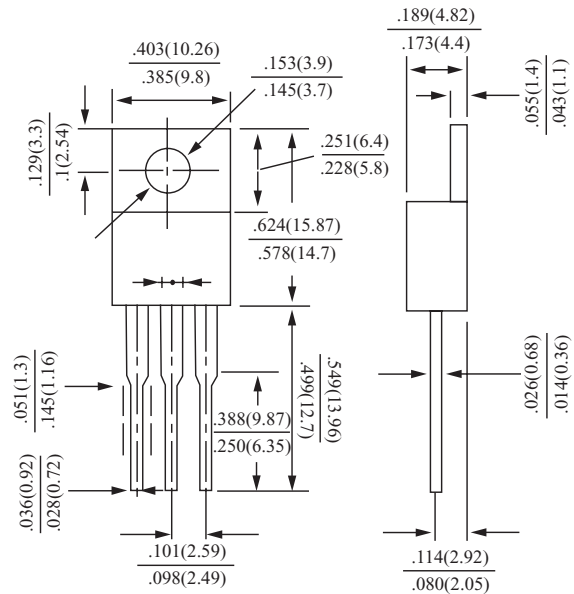
**FEATURES**

- 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 : TO-220AB molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.948 grams
- Mounting position : Any

**TO-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	MBR 3020CT	MBR 3040CT	MBR 3050CT	MBR 3060CT	MBR 3080CT	MBR 30100CT	MBR 30150CT	MBR 30200CT	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	40	50	60	80	100	150	200	V
Maximum RMS voltage	VRMS	14	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	VDC	20	40	50	60	80	100	150	200	V
Maximum average forward rectified current (Per leg)	I <sub>F</sub>	30.0 15.0								A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200.0								A
Maximum instantaneous I <sub>F</sub> =15A @TA=25 @TA=100	V <sub>F</sub>	0.60 0.54		0.69 0.61		0.82 0.68		0.87 0.73		V
Maximum DC Reverse Current @TA=25 at Rated DC Blocking Voltage @TA=100	I <sub>R</sub>	0.2 20								mA
Typical Junction Capacitance	C <sub>J</sub>	700		550		420		330		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

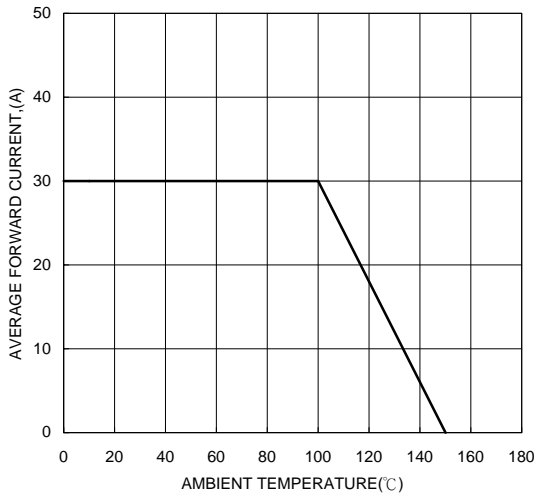


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

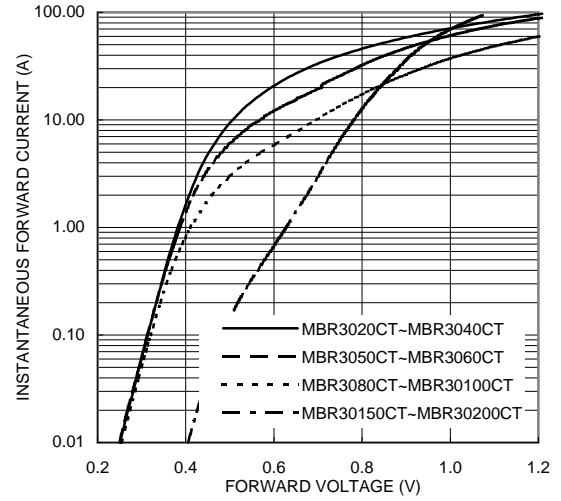


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

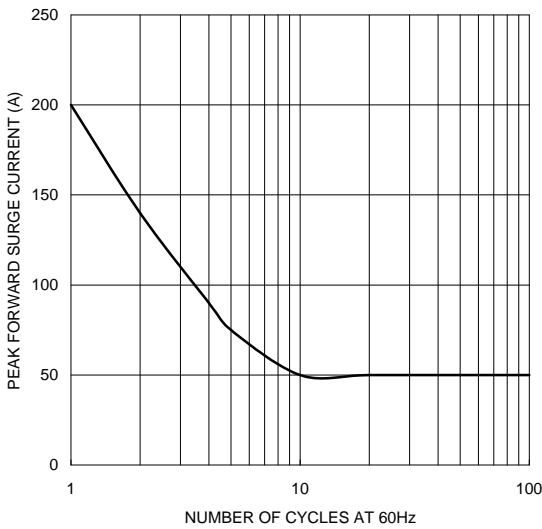


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

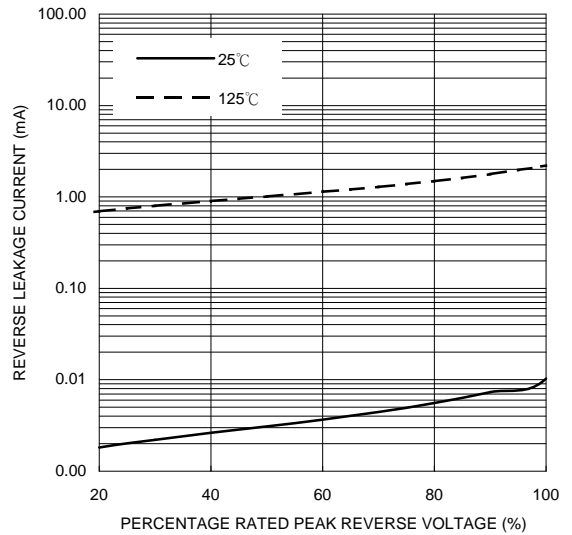


FIG. 5-TYPICAL JUNCTION CAPACITANCE

