

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **20 to 100** Volts  
FORWARD CURRENT - **40.0** Amperes

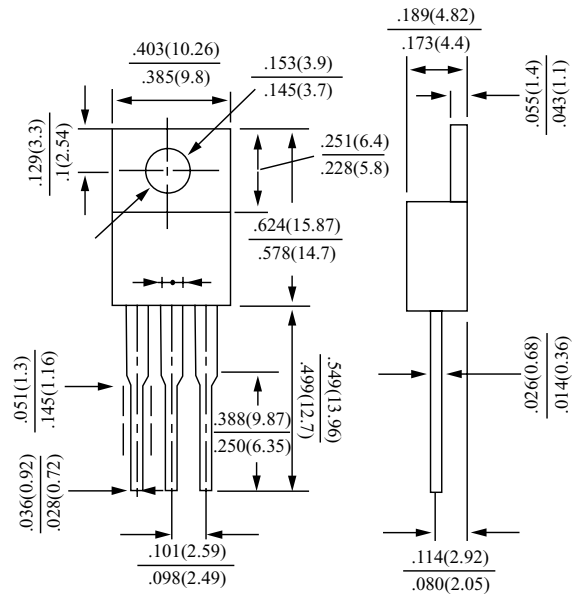
**FEATURES**

- 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 4020CT	MBR 4040CT	MBR 4050CT	MBR 4060CT	MBR 40100CT	UNIT	
Maximum repetitive peak reverse voltage	VRRM	20	40	50	60	100	V	
Maximum RMS voltage	VRMS	14	28	35	42	70	V	
Maximum DC blocking voltage	VDC	20	40	50	60	100	V	
Maximum average forward rectified current Per leg	IF	40				20		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	250.0						A
Maximum instantaneous @25 @125	VF	0.62 0.57		0.73 0.62		0.87 0.77	V	
Maximum DC Reverse Current @25 at Rated DC Blocking Voltage @125	IR	0.3 50.0						mA
Typical Junction Capacitance	CJ	900		700		550	pF	
Typical Thermal Resistance	R JC	3.0						/W
Operating Temperature Range	TJ	-55 to +175						
Storage Temperature Range	TSTG	-55 to +175						

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

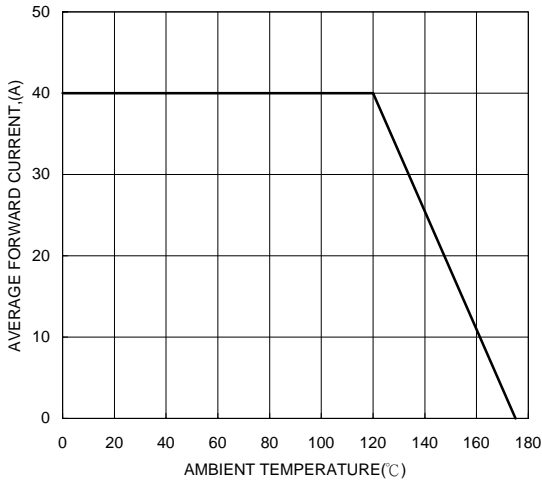


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

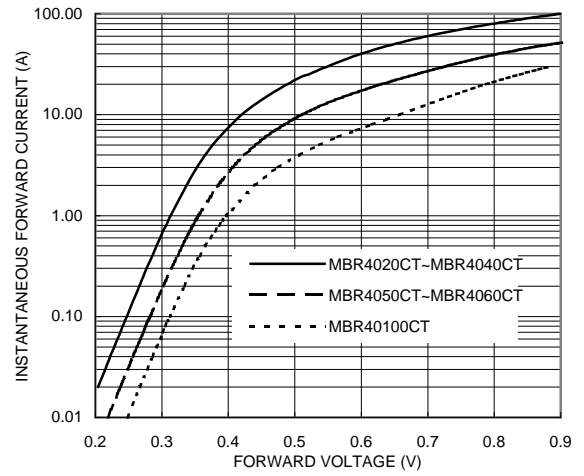


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

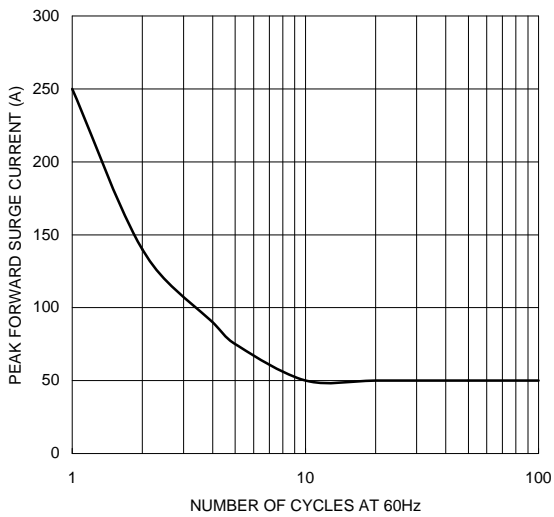


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

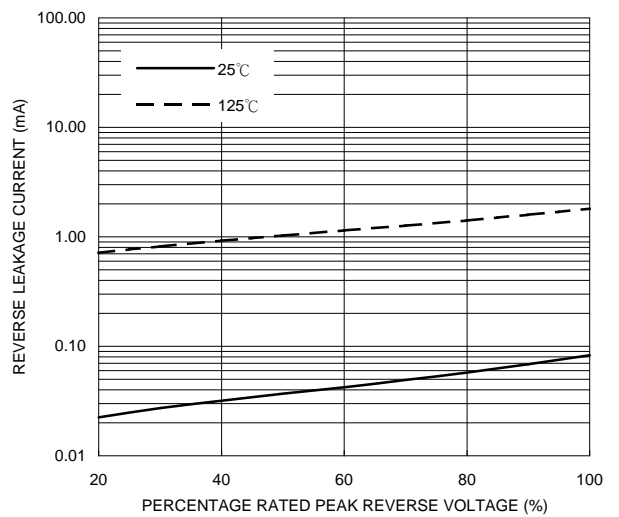


FIG. 5-TYPICAL JUNCTION CAPACITANCE

