



# SB3040

## SCHOTTKY BARRIER RECTIFIERS

### VOLTAGE

40 Volts

### CURRENT

30 Amperes

### TO-220AC

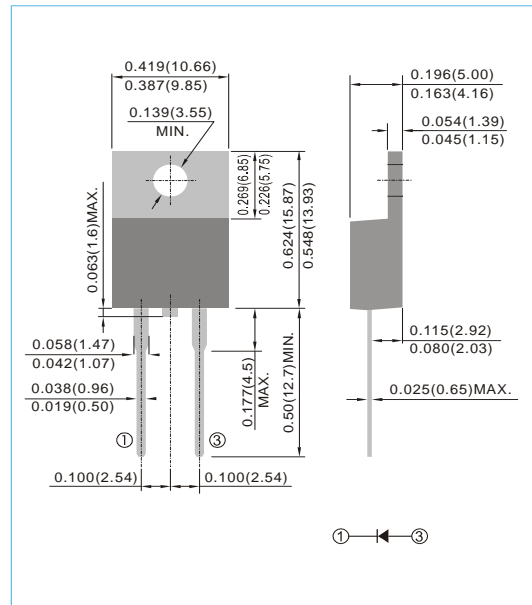
Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: TO-220AC Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0655 ounces, 1.859 grams.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

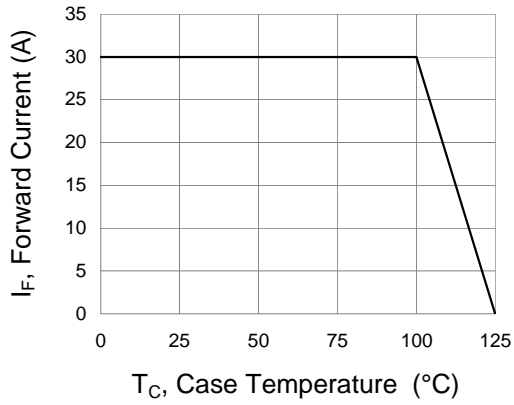
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum RMS Voltage	$V_{RMS}$	28	V
Maximum DC Blocking Voltage	$V_R$	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	30	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	350	A
Maximum Forward Voltage at 30A	$V_F$	0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	1	mA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2	°C / W
Operating Junction Temperature Range	$T_J$	-55 to +125	°C
Storage Temperature Range	$T_{STG}$	-55 to +125	°C

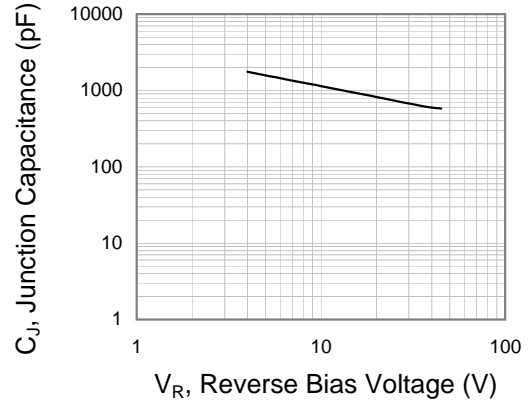
Note : 1. Mounted on infinite heatsink.



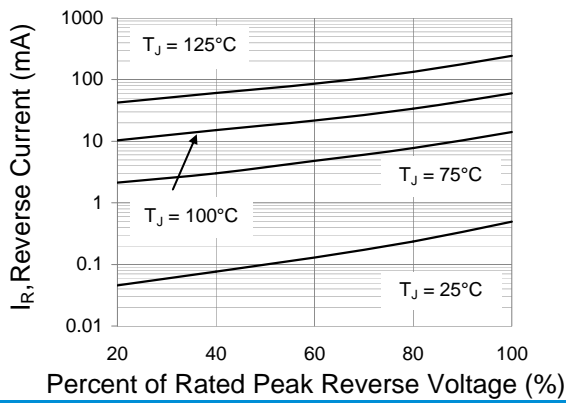
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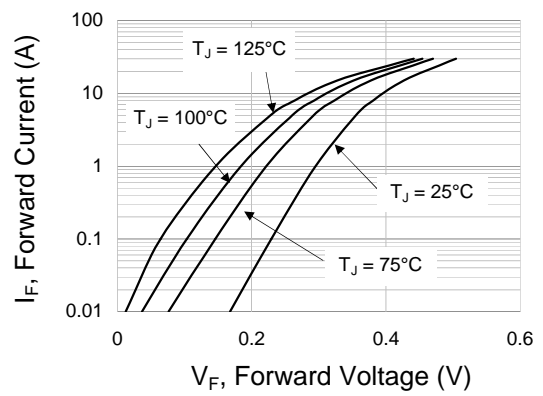
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**