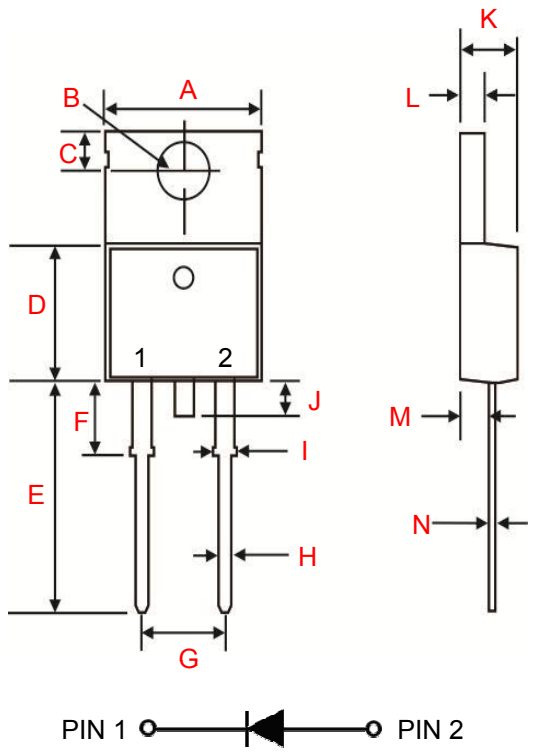
High Power Schottky Barrier Rectifier

Package Outline Dimensions (millimeters)



TO-220AC		
Dim.	Min.	Max.
A	10.01	10.31
B	3.77	3.89
C	2.64	2.95
D	8.76	9.02
E	13.70	14.10
F	3.98	4.23
G	4.98	5.18
H	0.71	0.91
I	1.17	1.52
J	----	1.60
K	4.47	4.67
L	1.17	1.37
M	2.52	2.82
N	0.28	0.48
All Dimensions in millimeter		

Features

- High Current Capability
- Low Switching Noise
- High Surge Capability
- Low Power Loss & High Efficiency
- Guard Ring Protection
- Pd-free lead plating & Halogen-free part

Mechanical

- Molded Plastic : TO-220AC
- Plastic materials used carries underwriters laboratory flammability classification 94V-0
- Lead Temperature for Soldering Purposes : 265℃ Max. for 10 Seconds
- Device Weight : Approximated 2.24 grams

Maximum Ratings & Electrical Characteristics (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	SB3040	SB3060	Units
DC Blocking Voltage	V_{RM}	40	60	Volts
Working Peak Reverse Voltage	V_{RWM}	28	42	
Peak Repetitive Reverse Voltage	V_{RRM}	40	60	
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	$I_{F(AV)}$	30		Amps
Non-Repetitive Peak Forward Surge Current (Surge applied at rated load conditions half wave, single phase, 60Hz)	I_{FSM}	500		Amps
Instantaneous Forward Voltage I_F = 30A , T_A = 25℃	V_F	0.55	0.7	Volts
Instantaneous Reverse Current $V_R = V_{RRM}$, T_A = 25℃	I_R	1.0		mA
$V_R = V_{RRM}$, T_A = 100℃		100		

NOTE： 1.Thermal resistance from junction to case per leg, with heatsink(1.35" x 0.95" x 0.18") Al-plate.

Thermal Characteristics (T_A = 25℃ unless otherwise specified)

Parameter		Symbol	Value	Units
Maximum Thermal Resistance	Junction to Case	$R\theta_{JC}$	3.5	℃ / W
Operating & Storage Junction Temperature		T_J	125	℃
		T_{STG}	- 65 to +150	

Ratings and Characteristics Curves (T_A = 25℃ unless otherwise specified)

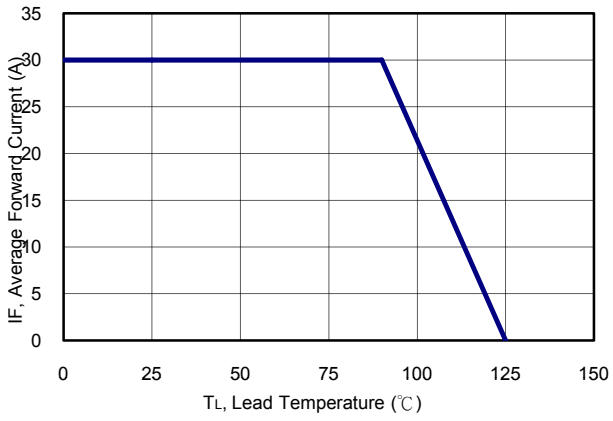


Figure 1: Current Derating Curves

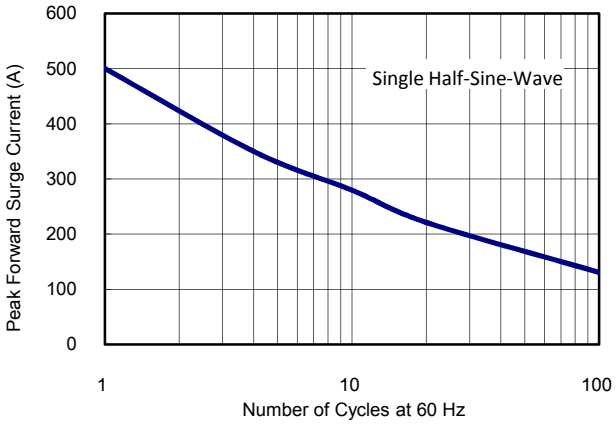


Figure 2: Peak Forward Surge Current

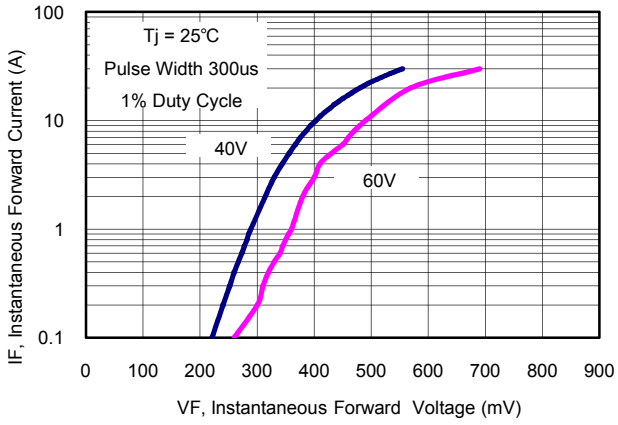


Figure 3: Typical Forward Characteristics

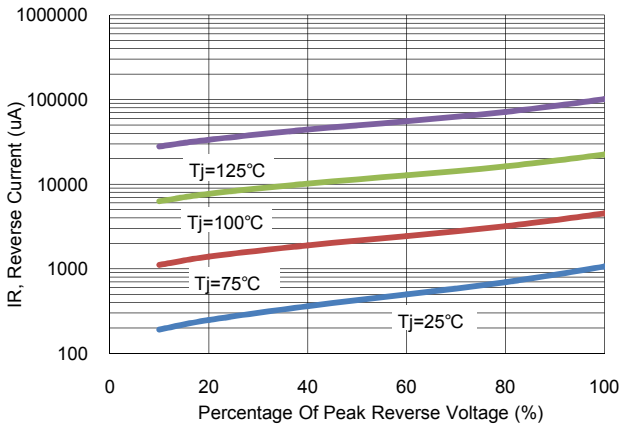
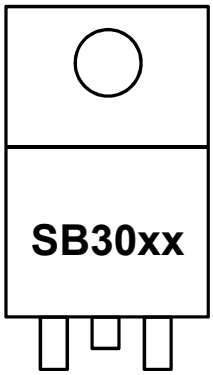


Figure 4: Typical Reverse Characteristics

Ordering information

Part Number	Package	Delivery mode
SB3040 / SB3060	TO-220AC	50 pieces / Tube

Marking Code Information



SB30xx = Product Type Marking Code

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