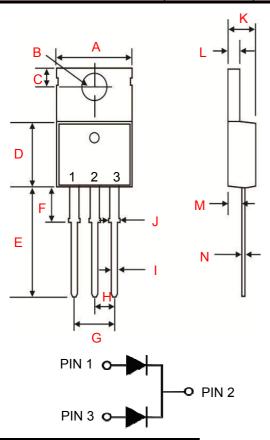
# High Power Schottky Barrier Rectifier

## Package Outline Dimensions (millimeters



TO-220AB				
Dim.	Min.	Max.		
Α	10.01	10.31		
В	3.79	3.89		
С	2.64	2.95		
D	8.76	9.02		
Е	13.70	14.10		
F	4.04	4.19		
G	4.98	5.18		
Н	2.54 BSC			
I	0.71	0.91		
J	1.17	1.50		
K	4.47	4.67		
L	1.17	1.37		
М	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 Low profile TO-220AB
- Plastic materials used carries underwriters laboratory flammability classification 94V-0
- Lead Temperature for Soldering Purposes : 265°C Max. for 10 Seconds
- Device Weight: Approximated 2.25 grams

# Maximum Ratings & Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise specified)

Parameter		Symbol	SB 2040CT	SB 2060CT	Units
DC Blocking Voltage		$V_{RM}$	40	60	
Working Peak Reverse Voltage		$V_{RWM}$	28	42	Volts
Peak Repetitive Reverse Voltage		$V_{RRM}$	40	60	
Average Rectified Output Current	(Total Device)	Io	20		Amps
Non-Repetitive Peak Forward Surge Current (Per Leg)		_	150		Amps
(Surge applied at rated load conditions half wave, single phase, 60Hz)		I <sub>FSM</sub>			
Instantaneous Forward Voltage (Per Leg)	I <sub>F</sub> = 10A , T <sub>A</sub> = 25℃	$V_{F}$	0.55	0.75	Volts
Instantaneous Reverse Current (Per Leg)	$V_R = V_{RRM}$ , $T_A = 25^{\circ}C$	ı	0.5		m A
	$V_R = V_{RRM}$ , $T_A = 100^{\circ}C$	I <sub>R</sub>	2	20	mA

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<sub>A</sub> = 25°C unless otherwise specified) (Per Leg)

Parameter	Symbol	Value	Units
Maximum Thermal Resistance Junction to Case	$R\theta_{JC}$	3.0	°C / W
Operating & Storage Junction Temperature	$T_J$	125	°Ç
Operating & Storage Sunction Temperature	T <sub>STG</sub>	- 65 to +150	J

## Ratings and Characteristics Curves (T<sub>A</sub> = 25°C unless otherwise specified)

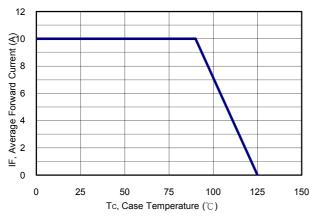


Figure 1: Current Derating Curves (Per Leg)



Figure 2: Peak Forward Surge Current (Per Leg)

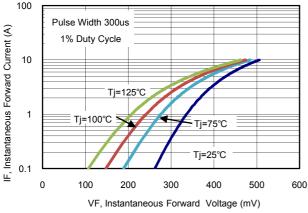


Figure 3: Typical Forward Characteristics (SB2040CT) (Per Leg)

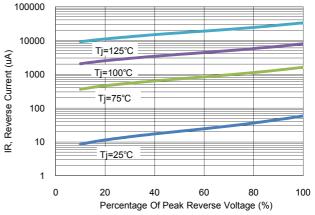


Figure 4: Typical Reverse Characteristics (SB2040CT) (Per Leg)

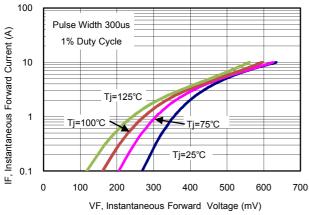


Figure 5: Typical Forward Characteristics (SB2060CT) (Per Leg)

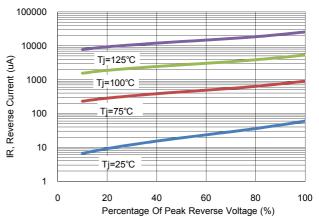
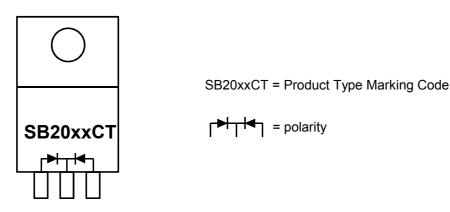


Figure 6: Typical Reverse Characteristics (SB2060CT) (Per Leg)

# **Ordering information**

Part Number	Package	Delivery mode
SB2040CT / SB2060CT	TO-220AB	50 pieces / Tube

## **Marking Code Information**



## **Disclaimer**

All product specifications and data are subject to change without notice.

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