

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 **SB220** Thru **SB260** 

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Schottky Barrier Rectifier
- **Guard Ring Protection**
- High Surge Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

### **Maximum Ratings**

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance: 15K/W Junction To Lead 50K/W Junction to Ambient\*

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SB220	20V	14V	20V
SB230	30V	21V	30V
SB240	40V	28V	40V
SB250	50V	35V	50V
SB260	60V	42V	60V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

			<u>.</u>
Average Rectified Output current*	Io	2A	T <sub>L</sub> = 100℃
Maximum surge current	I <sub>FSM</sub>	50A	8.3ms, half sine
Max peak forward			
voltage			
SB220-SB240	.,	.50V	$I_{FM} = 2.0A$
SB250-SB260	$V_{FM}$	.70V	
Max peak reverse		0.5mA	T <sub>A</sub> = 25°C
current	I <sub>RM</sub>	10mA	T <sub>A</sub> = 100°C
Typical junction			
capacitance			
SB220-SB240	CJ	170pF	$V_R = 4.0V$ ,
SB250-SB260		140pF	f=1.0MHz

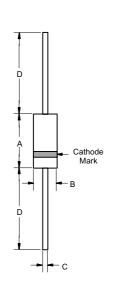
<sup>\*</sup>Valid provided that leads are kept at ambient temperature at a distance of 915mm from the case

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

# 2 Amp Schottky Rectifier

**DO-15** 

# 20V-60V

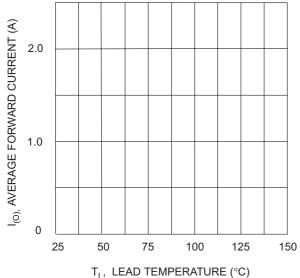


DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.230	.300	5.80	7.60		
В	.104	.140	2.60	3.60		
С	.026	.034	.70	.90		
D	1.000		25.40			

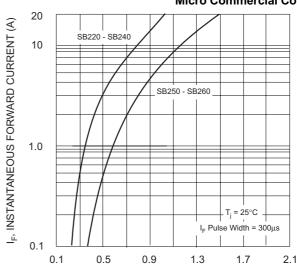
## **SB220 THRU SB260**



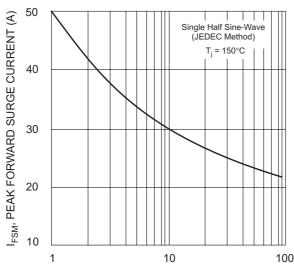
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 $T_L$ , LEAD TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

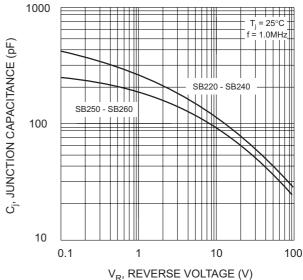
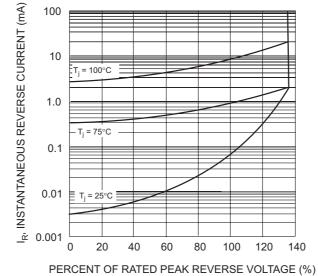


Fig. 4 Typical Junction Capacitance





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#### Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 4Kpcs/Reel	
Part Number-AP	Ammo Packing: 3Kpcs/Ammo Box	
Part Number-BP	Bulk: 25Kpcs/Carton	

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