

**M** 

E502650

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Surface Mount Package
- Low Profile Package

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Lead
- Typical Thermal Resistance: 40°C/W Junction to Ambient

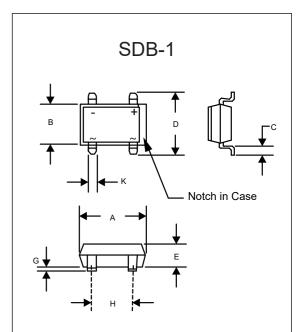
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SDB201	SDB201	50V	35V	50V
SDB202	SDB202	100V	70V	100V
SDB203	SDB203	200V	140V	200V
SDB204	SDB204	400V	280V	400V
SDB205	SDB205	600V	420V	600V
SDB206	SDB206	800V	560V	800V
SDB207	SDB207	1000V	700V	1000V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>A</sub> = 40°C	
Peak Forward Surge Current	I <sub>FSM</sub>	60A	8.3ms, Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.2V	I <sub>F</sub> = 2.0A T <sub>J</sub> = 25°C	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10μA 0.5mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	
Typical Junction Capacitance	CJ	25pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V	
Rating For Fusing	l²t	14.9A <sup>2</sup> s	t<8.3ms	

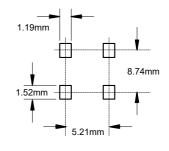
Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

# 2 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
ואווט	MIN	MAX	MIN	MAX	NOTE	
Α	0.316	0.335	8.05	8.51		
В	0.245	0.255	6.20	6.50		
С	0.040	0.060	1.02	1.50		
D	0.360	0.410	9.40	10.40		
Е	0.102	0.130	2.60	3.30		
G	0.003	0.013	0.076	0.33		
Η	0.195	0.205	5.00	5.20		
K	0.038	0.047	1.00	1.20		

#### Suggested Solder Pad Layout





# **Curve Characteristics**

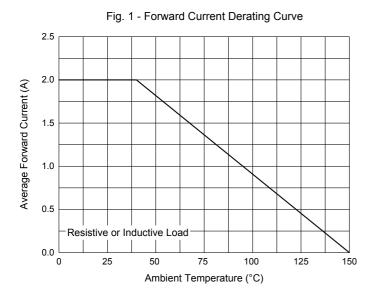


Fig. 3 - Typical Instantaneous Forward Characteristics

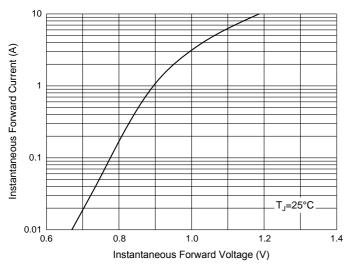


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

80

40

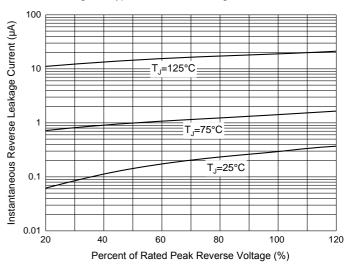
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel1.5Kpcs/Reel		
Part Number-BP	Bulk; 5K/Box		

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

#### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp**. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp**, and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

# \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC): SDB204-TP SDB207-TP