



Micro Commercial Components



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## SDB201 THRU SDB207

### Features

- Surface Mount Package
- Glass Passivated Diode Construction
- High Surge Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

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

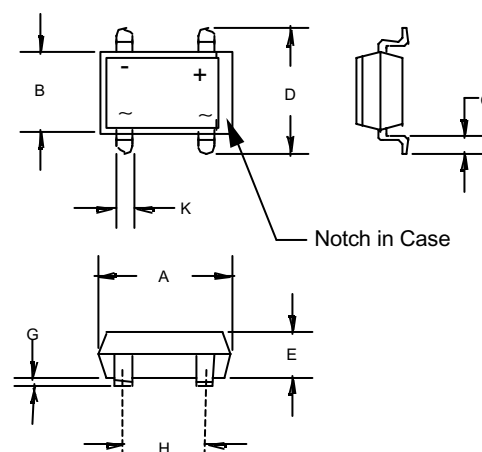
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0 A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	60A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.2V	$I_F = 2.0\text{A}; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10μA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Rating For Fusing	$I^2t$	14.9A <sup>2</sup> s	$t < 8.3\text{ms}$

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

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

SDB-1



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.040	.060	1.02	1.50	
D	.360	.410	9.40	10.4	
E	.102	.130	2.60	3.30	
G	.003	.013	.076	.330	
H	.195	.205	5.00	5.20	
K	.038	.047	1.00	1.20	

### Suggested Solder Pad Layout

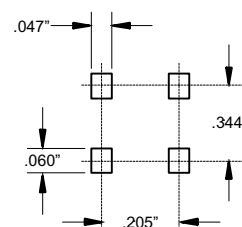


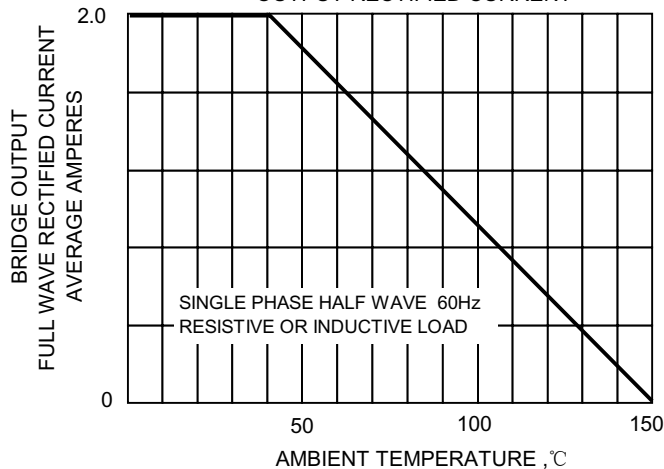
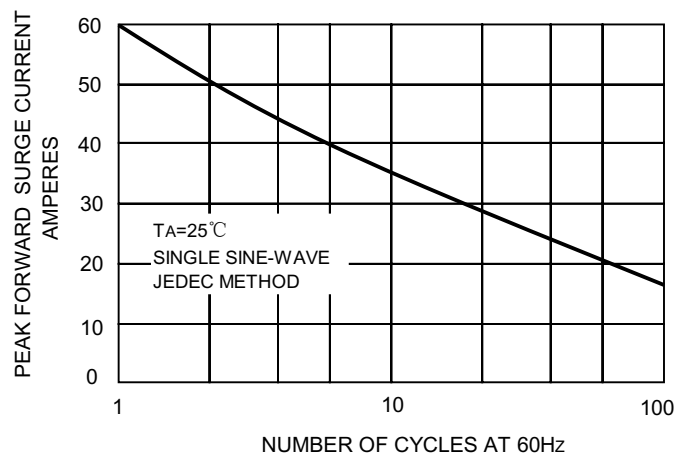
FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENTFIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT

FIG.3-TYPICAL JUNCTION CAPACITANCE

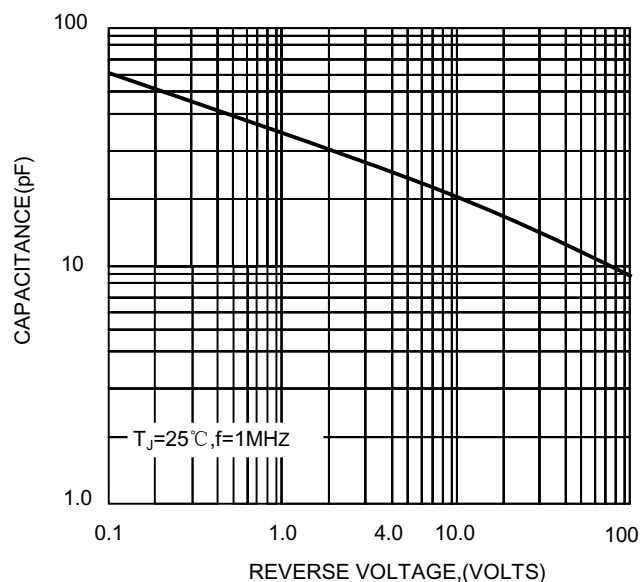


FIG.4-TYPICAL FORWARD CHARACTERISTICS

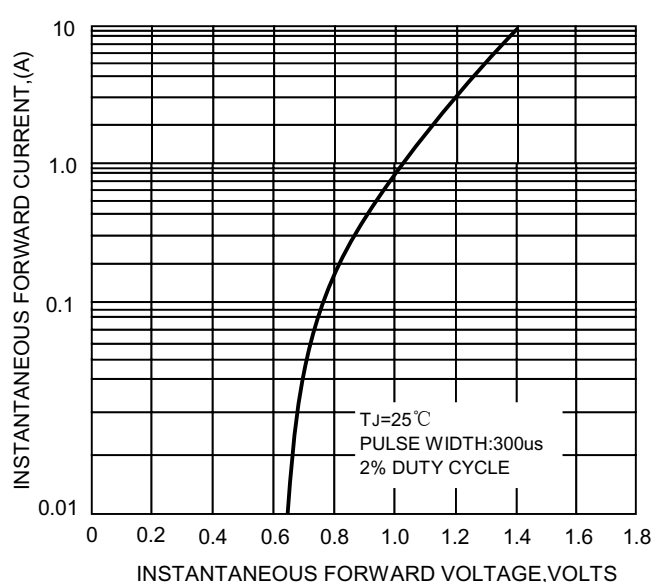
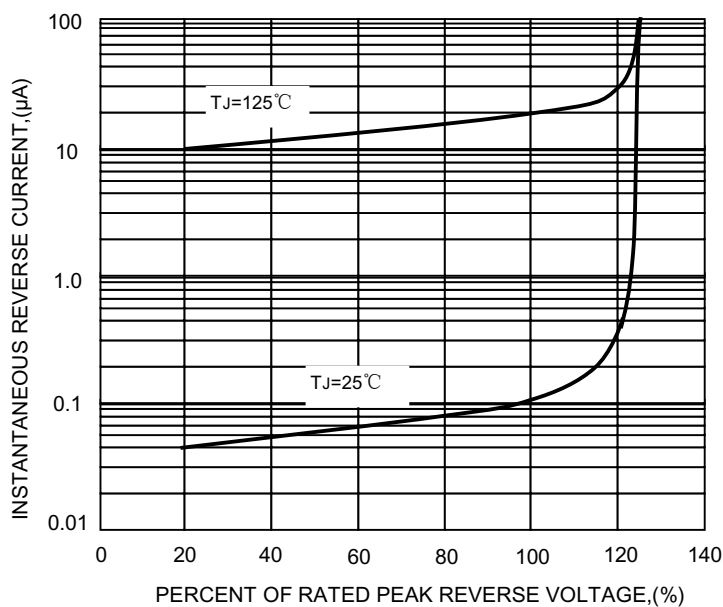


FIG.5-TYPICAL REVERSE CHARACTERISTICS



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;1.5Kpcs/Reel
(Part Number)-BP	Bulk; 5K/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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