



Micro Commercial Components



Micro Commercial Components  
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## S2B40

### Features

- Surface Mount Package
- Full wave bridge rectifier
- Utilizing glass passivated chips
- 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

### Maximum Ratings

- Operating Temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Storage Temperature:  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| S2B40           | 2B40           | 40V                                    | 28V                 | 40V                         |

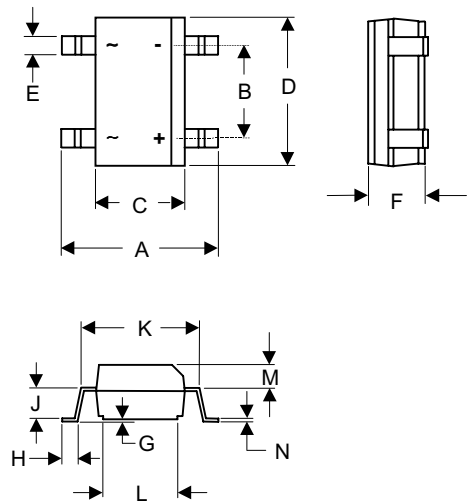
### Electrical Characteristics @ $25^{\circ}\text{C}$ Unless Otherwise Specified

|                                       |                 |                          |                                                                 |
|---------------------------------------|-----------------|--------------------------|-----------------------------------------------------------------|
| Average Forward Current               | $I_o$           | 2.0 A                    |                                                                 |
| Peak Forward Surge Current            | $I_{FSM}$       | 30A                      | 8.3ms, half sine                                                |
| Maximum Instantaneous Forward Voltage | $V_F$           | 0.55V                    | $I_F = 2.0\text{A};$                                            |
| Reverse Current                       | $I_R$           | 50 $\mu\text{A}$<br>20mA | $V_R=40\text{V}$<br>$V_R=40\text{V}, T_A = 125^{\circ}\text{C}$ |
| Power Dissipation                     | $P_D$           | 1.2W                     |                                                                 |
| Typical Thermal Resistance            | $R_{\theta JA}$ | 85 $^{\circ}\text{C/W}$  |                                                                 |
| Typical Junction Capacitance          | $C_J$           | 250pF                    | $f=1.0\text{MHz}, V_R=4.0\text{V}$                              |

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

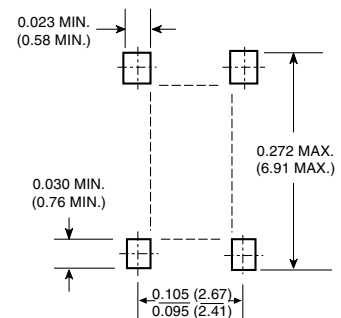
## 2 Amp Schottky Bridge Rectifier

### MBS -1



| DIM | INC HES |      | MM   |      | NOTE |
|-----|---------|------|------|------|------|
|     | MIN     | MAX  | MIN  | MAX  |      |
| A   | .252    | .272 | 6.40 | 6.90 |      |
| B   | .095    | .105 | 2.41 | 2.67 |      |
| C   | .144    | .161 | 3.65 | 4.10 |      |
| D   | .179    | .195 | 4.55 | 4.95 |      |
| E   | .017    | .029 | 0.43 | 0.74 |      |
| F   | .090    | .106 | 2.30 | 2.70 |      |
| G   | .004    | .008 | 0.10 | 0.20 |      |
| H   | .019    | .038 | 0.48 | 0.96 |      |
| J   | .058    | .062 | 1.47 | 1.57 |      |
| K   | .195    | .205 | 4.95 | 5.21 |      |
| L   | .110    | .114 | 2.80 | 2.90 |      |
| M   | .039    | .049 | 0.99 | 1.24 |      |
| N   | .006    | .016 | 0.15 | 0.41 |      |

### Mounting Pad Layout



## Ordering Information

| Device           | Packing              |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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