



Micro Commercial Components  
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## SK32B-LT THRU SK310B-LT

### Features

- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- High Temp Soldering: 250°C for 10 Seconds At Terminals
- High Current Capability With Low Forward Voltage

### Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| SK32B-LT           | SK32B          | 20V                                    | 14V                 | 20V                         |
| SK33B-LT           | SK33B          | 30V                                    | 21V                 | 30V                         |
| SK34B-LT           | SK34B          | 40V                                    | 28V                 | 40V                         |
| SK35B-LT           | SK35B          | 50V                                    | 35V                 | 50V                         |
| SK36B-LT           | SK36B          | 60V                                    | 42V                 | 60V                         |
| SK38B-LT           | SK38B          | 80V                                    | 56V                 | 80V                         |
| SK310B-LT          | SK310B         | 100V                                   | 70V                 | 100V                        |

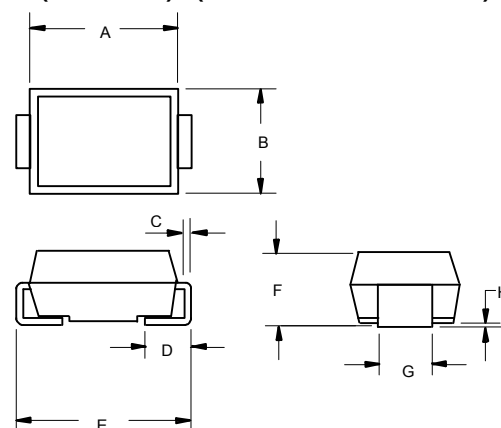
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                                     |             |                      |                                                       |
|-------------------------------------------------------------------------------------|-------------|----------------------|-------------------------------------------------------|
| Average Forward Current                                                             | $I_{F(AV)}$ | 3.0A                 | $T_J = 120^\circ\text{C}$                             |
| Peak Forward Surge Current                                                          | $I_{FSM}$   | 100A                 | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>SK32B~SK34B<br>SK35B~SK36B<br>SK38B~SK310B | $V_F$       | .50V<br>.75V<br>.85V | $I_{FM} = 3.0A$ ;<br>$T_J = 25^\circ\text{C}^*$       |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                             | $I_R$       | .5mA<br>20mA         | $T_J = 25^\circ\text{C}$<br>$T_J = 100^\circ\text{C}$ |
| Typical Junction Capacitance                                                        | $C_J$       | 250pF                | Measured at 1.0MHz, $V_R=4.0V$                        |

\*Pulse test: Pulse width 200  $\mu\text{sec}$ , Duty cycle 2%

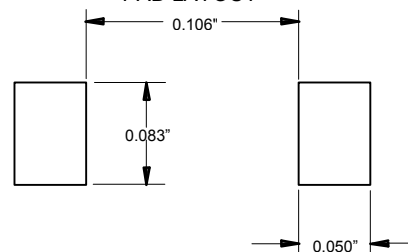
### 3 Amp Schottky Rectifier 20 to 100 Volts

#### DO-214AA (SMBJ) (LEAD FRAME)



| DIMENSIONS |        |      |      |       |      |
|------------|--------|------|------|-------|------|
| DIM        | INCHES |      | MM   |       | NOTE |
|            | MIN    | MAX  | MIN  | MAX   |      |
| A          | .160   | .185 | 4.06 | 4.70  |      |
| B          | .130   | .155 | 3.30 | 3.94  |      |
| C          | .006   | .012 | 0.15 | 0.31  |      |
| D          | .030   | .060 | 0.76 | 1.52  |      |
| E          | .200   | .220 | 5.08 | 5.59  |      |
| F          | .079   | .103 | 2.01 | 2.62  |      |
| G          | .075   | .087 | 1.91 | 2.21  |      |
| H          | .002   | .008 | 0.05 | 0.203 |      |

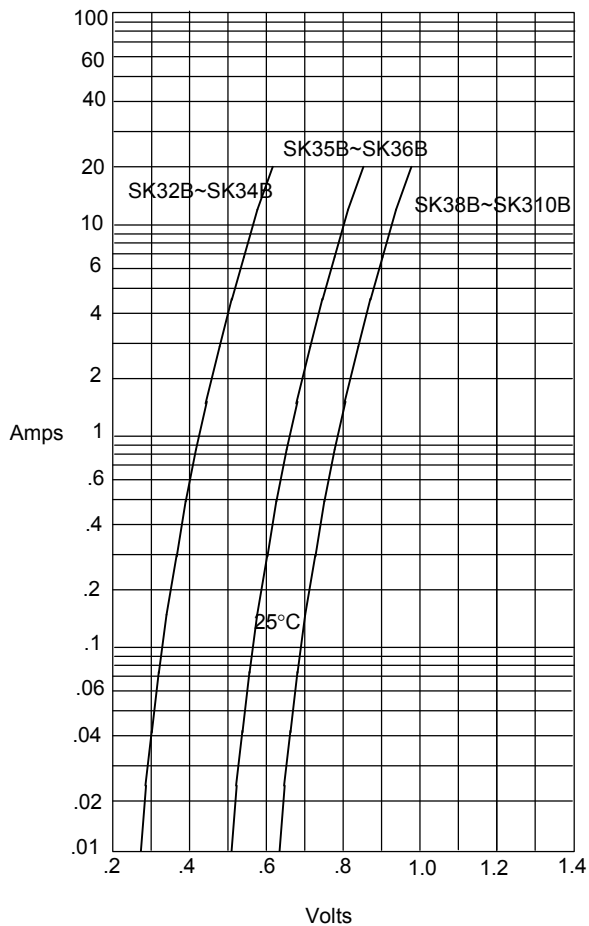
#### SUGGESTED SOLDER PAD LAYOUT



# SK32B-LT thru SK310B-LT

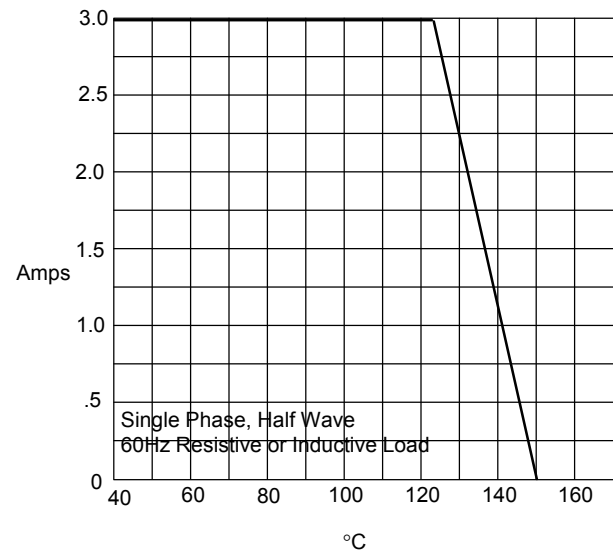


Figure 1  
Typical Forward Characteristics



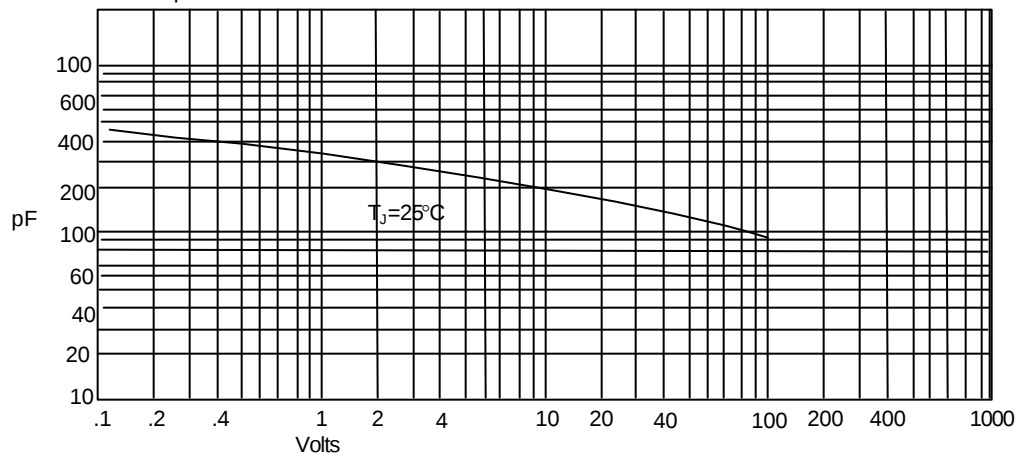
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 3  
Junction Capacitance

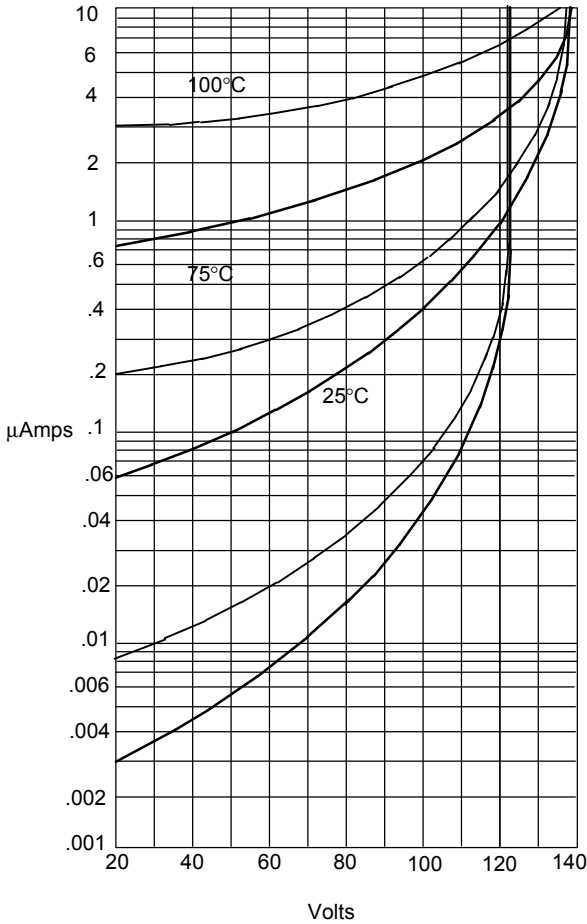


Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

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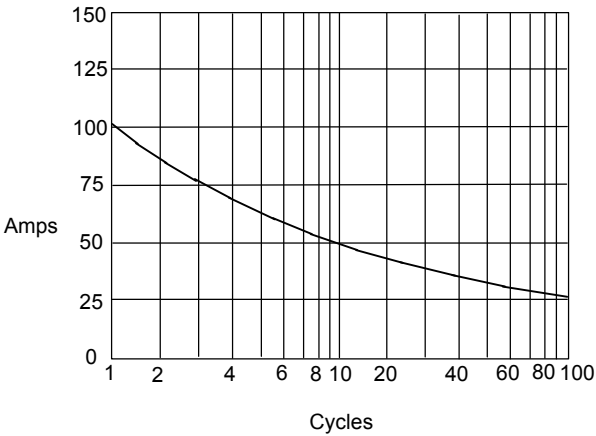


Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles