



Micro Commercial Components



Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

# SK32B THRU SK310B

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Thermal Resistance
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- High Current Capability With Low Forward Voltage
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

## 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              | SK32B          | 20V                                    | 14V                 | 20V                         |
| SK33B              | SK33B          | 30V                                    | 21V                 | 30V                         |
| SK34B              | SK34B          | 40V                                    | 28V                 | 40V                         |
| SK35B              | SK35B          | 50V                                    | 35V                 | 50V                         |
| SK36B              | SK36B          | 60V                                    | 42V                 | 60V                         |
| SK38B              | SK38B          | 80V                                    | 56V                 | 80V                         |
| SK310B             | SK310B         | 100V                                   | 70V                 | 100V                        |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

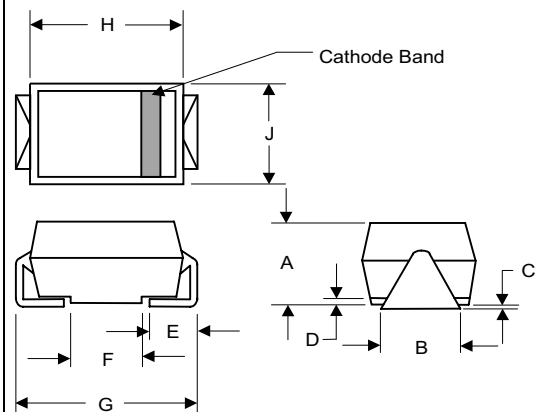
|                                                                               |             |                      |                                                       |
|-------------------------------------------------------------------------------|-------------|----------------------|-------------------------------------------------------|
| Average Forward Current                                                       | $I_{F(AV)}$ | 3.0A                 | $T_L = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                                                    | $I_{FSM}$   | 100A                 | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>SK32B-34B<br>SK35B-36B<br>SK38B-310B | $V_F$       | .50V<br>.75V<br>.85V | $I_{FM} = 3.0\text{A};$<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                                                  | $C_J$       | 45pF                 | Measured at 1.0MHz, $V_R=4.0\text{V}$                 |

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

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

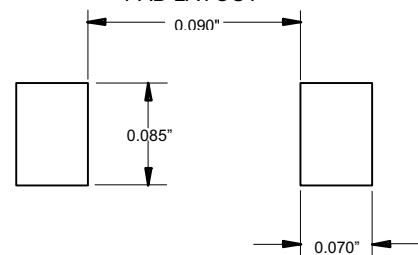
## 3 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AA (HSMB) (Round Lead)



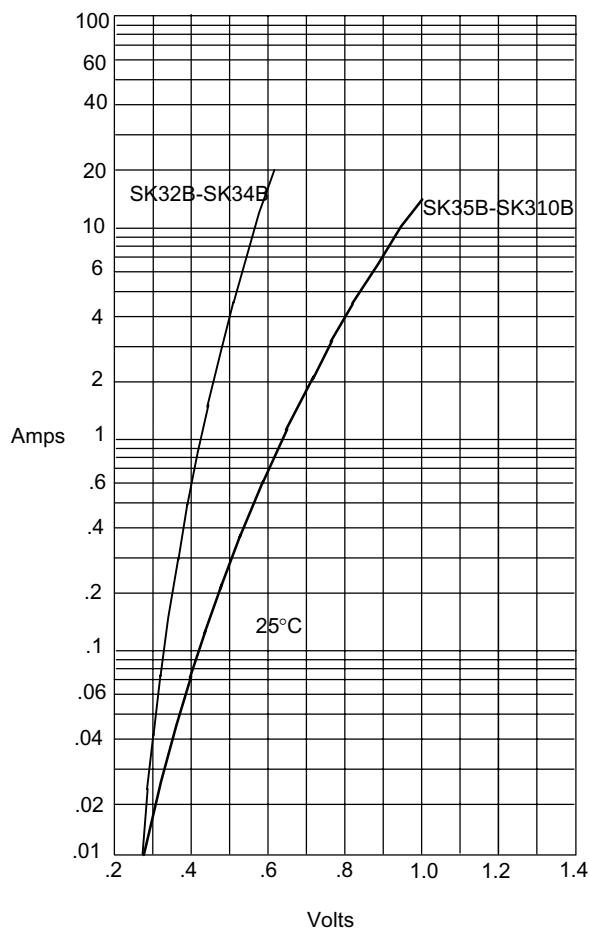
| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .078   | .116 | 1.98 | 2.95 |      |
| B   | .075   | .089 | 1.90 | 2.25 |      |
| C   | .002   | .008 | .05  | .20  |      |
| D   | ----   | .02  | ---- | .51  |      |
| E   | .035   | .055 | .90  | 1.40 |      |
| F   | .065   | .091 | 1.65 | 2.32 |      |
| G   | .205   | .224 | 5.21 | 5.69 |      |
| H   | .160   | .180 | 4.06 | 4.57 |      |
| J   | .130   | .155 | 3.30 | 3.94 |      |

### SUGGESTED SOLDER PAD LAYOUT



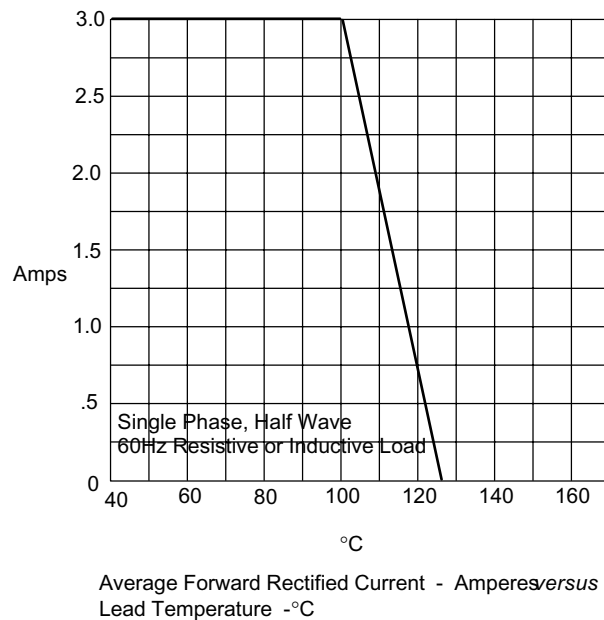
# SK32B thru SK310B

Figure 1  
Typical Forward Characteristics



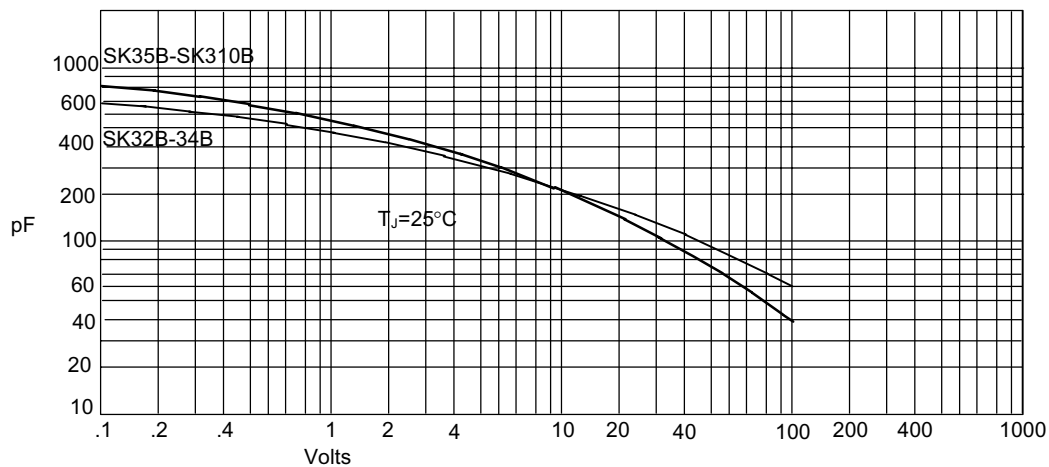
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

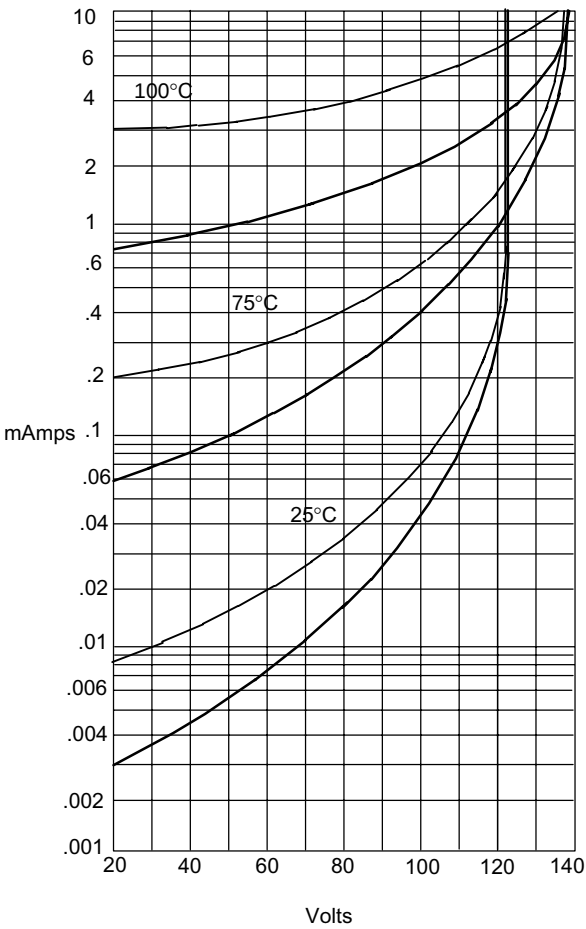
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

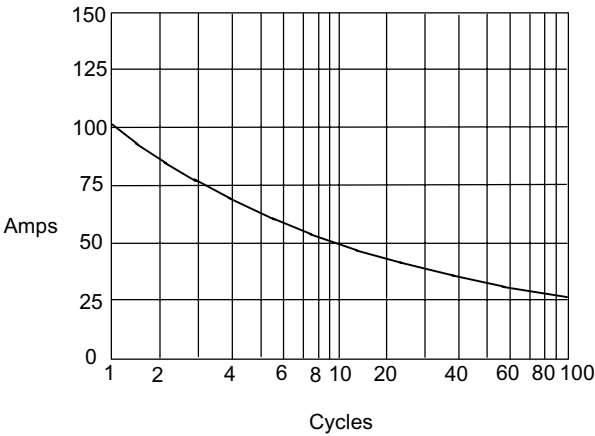
# SK32B thru SK310B

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmpere *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

## Ordering Information :

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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

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