NOT RECOMMENDED FOR NEW DESIGNS USE SK32B-LTP~SK310B-LTP Series



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 | Device | Maximum | Maximum | Maximum |
|---------|---------|--------------|---------|----------|
| Catalog | Marking | Recurrent | RMS | DC |
| Number | | Peak Reverse | Voltage | Blocking |
| | | Voltage | | 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 |

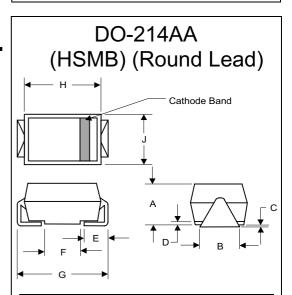
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | - | | |
|--------------------|-------------|------|------------------------------|
| Average Forward | $I_{F(AV)}$ | 3.0A | T _L = 100°C |
| Current | | | |
| Peak Forward Surge | I_{FSM} | 100A | 8.3ms, half sine |
| Current | | | |
| Maximum | | | |
| Instantaneous | | | |
| Forward Voltage | | | |
| SK32B-34B | V_{F} | .50V | $I_{FM} = 3.0A;$ |
| SK35B-36B | | .75V | T _J = 25°C* |
| SK38B-310B | | .85V | |
| Maximum DC | | | |
| Reverse Current At | I_R | .5mA | T _J = 25°C |
| Rated DC Blocking | | 20mA | T _J = 100°C |
| Voltage | | | J - |
| Typical Junction | С | 45pF | Measured at |
| Capacitance | | | 1.0MHz, V _R =4.0V |

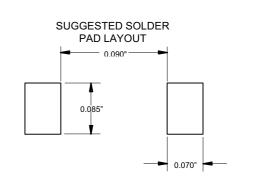
^{*}Pulse test: Pulse width 200 µsec, Duty cycle 2%

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

3 Amp Schottky Rectifier 20 to 100 Volts



| DIMENSIONS | | | | | | |
|------------|--------|------|------|------|------|--|
| | INCHES | | ММ | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .078 | .116 | 1.98 | 2.95 | | |
| В | .075 | .089 | 1.90 | 2.25 | | |
| С | .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 | | |
| Н | .160 | .180 | 4.06 | 4.57 | | |
| J | .130 | .155 | 3.30 | 3.94 | | |



SK32B thru SK310B

Figure 1
Typical Forward Characteristics



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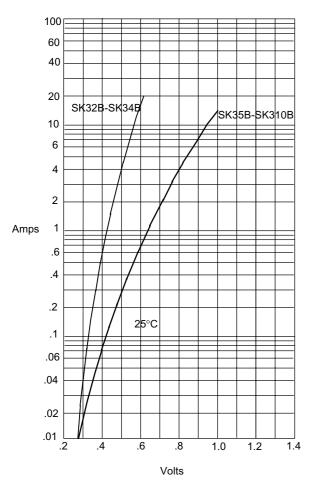
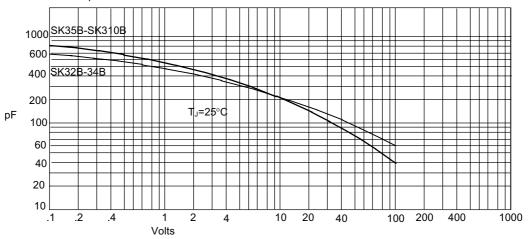


Figure 2 Forward Derating Curve 3.0 2.5 2.0 1.5 Amps 1.0 Single Phase, Half Wave 60Hz Resistive or Inductive 0 <u></u> 100 120 140 160 ٥С

Average Forward Rectified Current - Amperesversus Lead Temperature - $^{\circ}$ C

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

Figure 3
Junction Capacitance



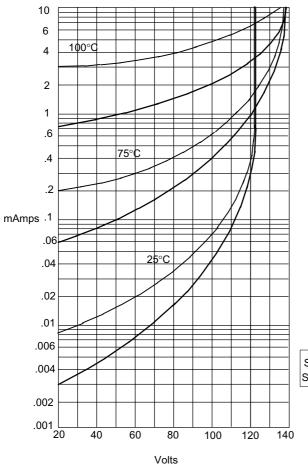
Junction Capacitance - pF*versus* Reverse Voltage - Volts

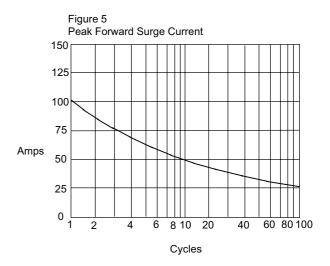
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Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperesversus Percent Of Rated Peak Reverse Voltage - Volts



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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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