

# SK32A-LT THRU SK310A-LT

## 3 Amp Schottky Rectifier 20 to 100 Volts

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- High Current Capability With Low Forward Voltage
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

### Maximum Ratings

- Operating Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| SK32A-LT        | SK32A          | 20V                                    | 14V                 | 20V                         |
| SK33A-LT        | SK33A          | 30V                                    | 21V                 | 30V                         |
| SK34A-LT        | SK34A          | 40V                                    | 28V                 | 40V                         |
| SK35A-LT        | SK35A          | 50V                                    | 35V                 | 50V                         |
| SK36A-LT        | SK36A          | 60V                                    | 42V                 | 60V                         |
| SK38A-LT        | SK38A          | 80V                                    | 56V                 | 80V                         |
| SK310A-LT       | SK310A         | 100V                                   | 70V                 | 100V                        |

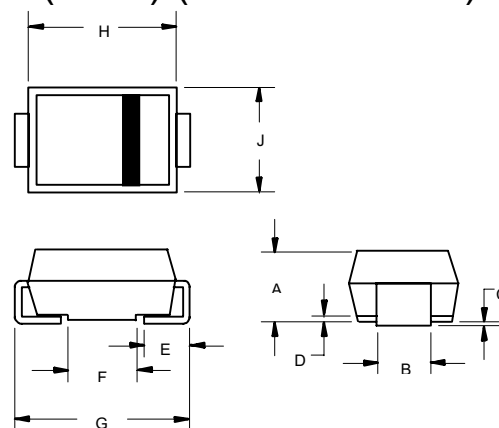
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                               |             |                      |                                                       |
|-------------------------------------------------------------------------------|-------------|----------------------|-------------------------------------------------------|
| Average Forward Current                                                       | $I_{F(AV)}$ | 3.0A                 | $T_A = 125^\circ\text{C}$                             |
| Peak Forward Surge Current                                                    | $I_{FSM}$   | 80A                  | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>SK32A-34A<br>SK35A-36A<br>SK38A-310A | $V_F$       | .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%

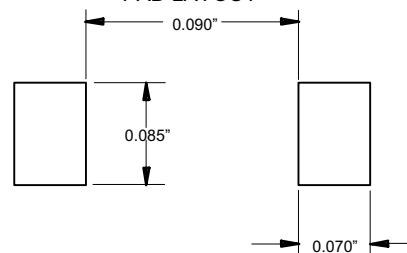
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

### DO-214AC (SMA) (LEAD FRAME)



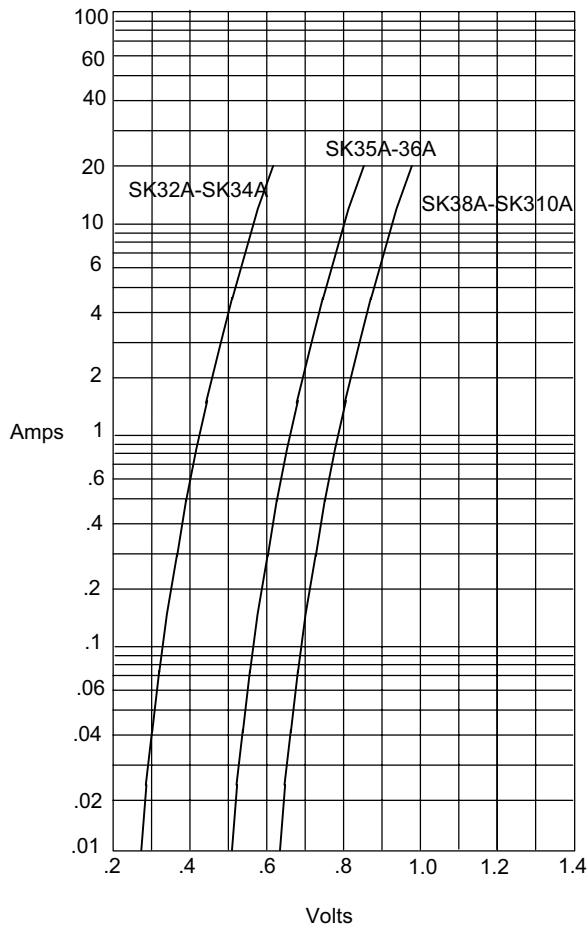
| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .079   | .096 | 2.00 | 2.44 |      |
| B   | .050   | .064 | 1.27 | 1.63 |      |
| C   | .002   | .008 | .05  | .20  |      |
| D   | —      | .02  | —    | .51  |      |
| E   | .030   | .060 | .76  | 1.52 |      |
| F   | .065   | .091 | 1.65 | 2.32 |      |
| G   | .189   | .220 | 4.80 | 5.59 |      |
| H   | .157   | .181 | 4.00 | 4.60 |      |
| J   | .090   | .115 | 2.25 | 2.92 |      |

### SUGGESTED SOLDER PAD LAYOUT



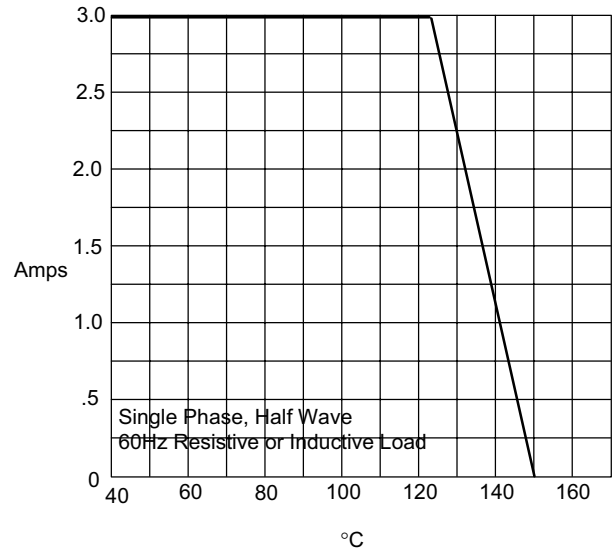
# SK32A-LT thru SK310A-LT

Figure 1  
Typical Forward Characteristics



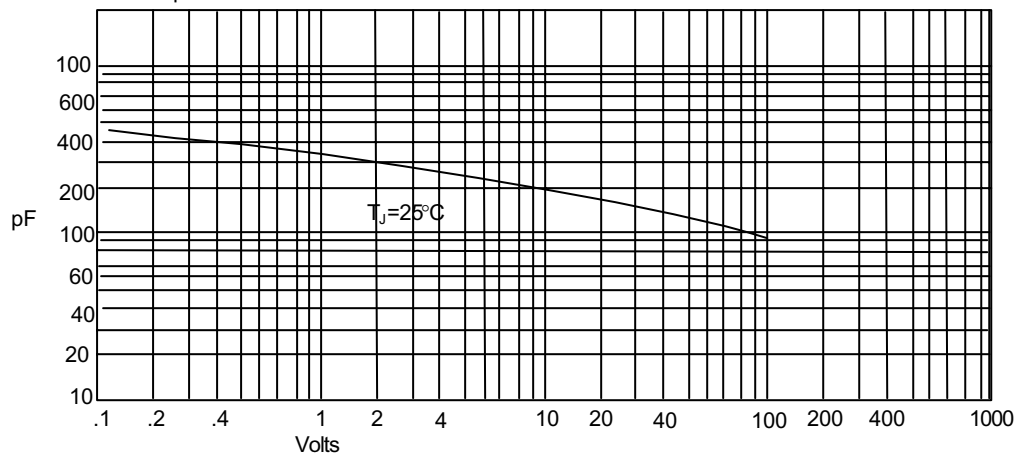
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance



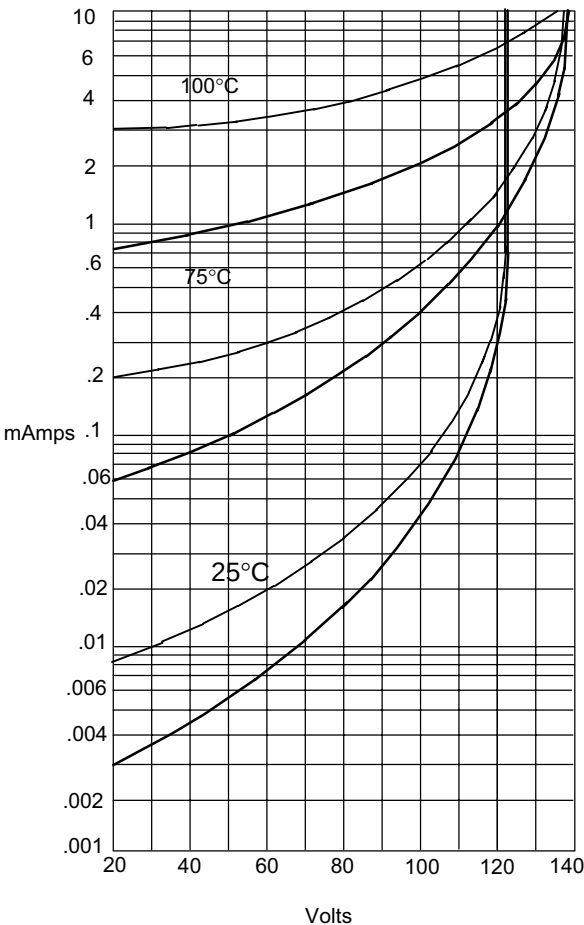
Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

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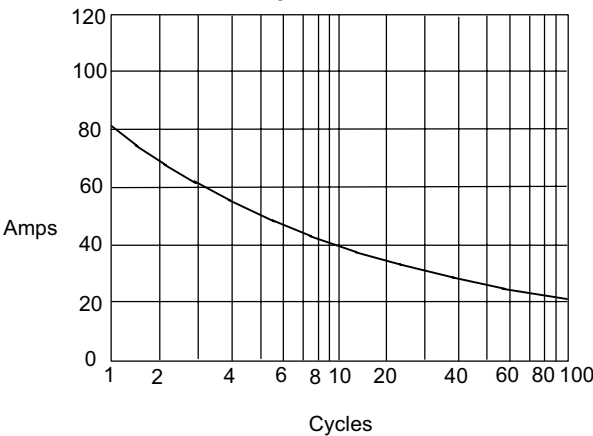
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Figure 4  
Typical Reverse Characteristics



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



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## Ordering Information

| Device           | Packing              |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;5Kpcs/Reel |

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