

TM

SK32A THRU SK310A

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Same Electrical Characteristics As The SMC Version
- Very Low Cost
- Can Be Up To 50% Smaller Than The SMC To Save Precious Board Space
- High Current Capability With Low Forward Voltage
- For Surface Mount Applications
- 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 | SK32A | 20V | 14V | 20V |
| SK33A | SK33A | 30V | 21V | 30V |
| SK34A | SK34A | 40V | 28V | 40V |
| SK35A | SK35A | 50V | 35V | 50V |
| SK36A | SK36A | 60V | 42V | 60V |
| SK38A | SK38A | 80V | 56V | 80V |
| SK310A | SK310A | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

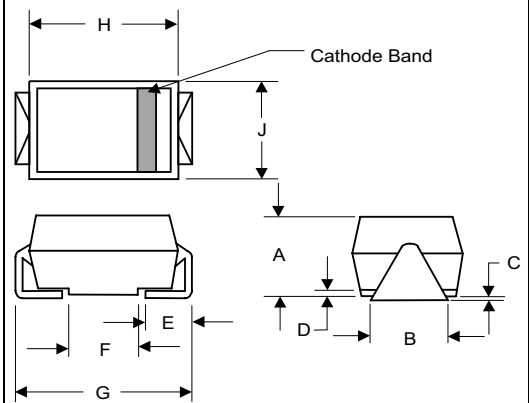
| | | | |
|---|-------------|----------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | $T_L = 100^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 100A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage SK32A-34A SK35A-36A SK38A-310A | V_F | .50V .75V .85V | $I_{FM} = 3.0A;$ $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | .5mA 20mA | $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 45pF | Measured at 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.

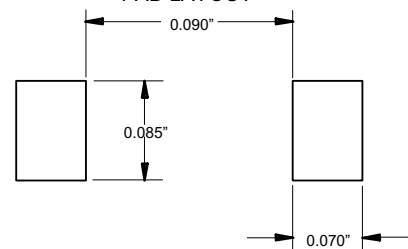
3 Amp Schottky Rectifier 20 to 100 Volts

DO-214AC (HSMA) (High Profile)



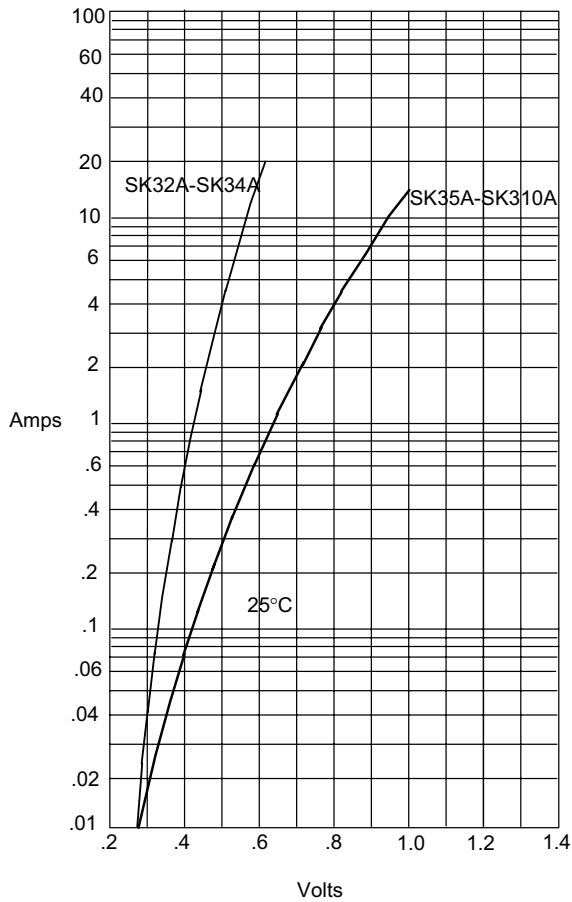
| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .078 | .116 | 1.98 | 2.95 | |
| B | .067 | .089 | 1.70 | 2.25 | |
| C | .002 | .008 | .05 | .20 | |
| D | — | .02 | — | .51 | |
| E | .035 | .055 | .89 | 1.40 | |
| F | .065 | .096 | 1.65 | 2.45 | |
| G | .205 | .224 | 5.21 | 5.69 | |
| H | .160 | .180 | 4.06 | 4.57 | |
| J | .100 | .112 | 2.57 | 2.84 | |

SUGGESTED SOLDER PAD LAYOUT



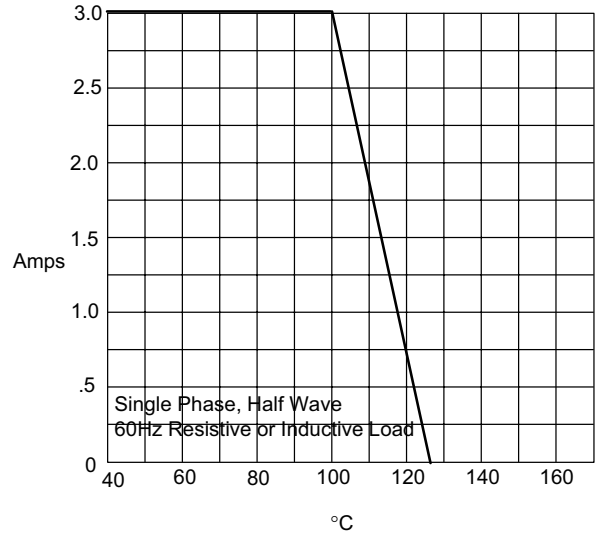
SK32A thru SK310A

Figure 1
Typical Forward Characteristics



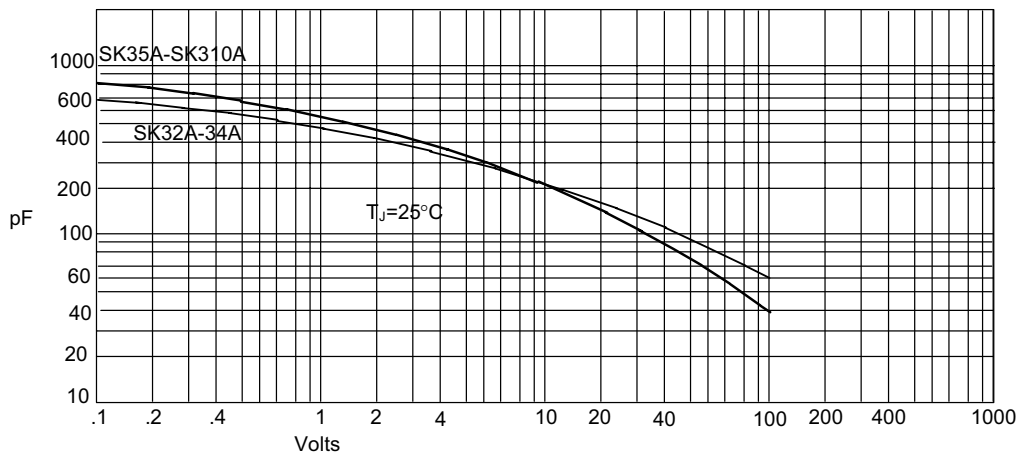
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Junction Capacitance

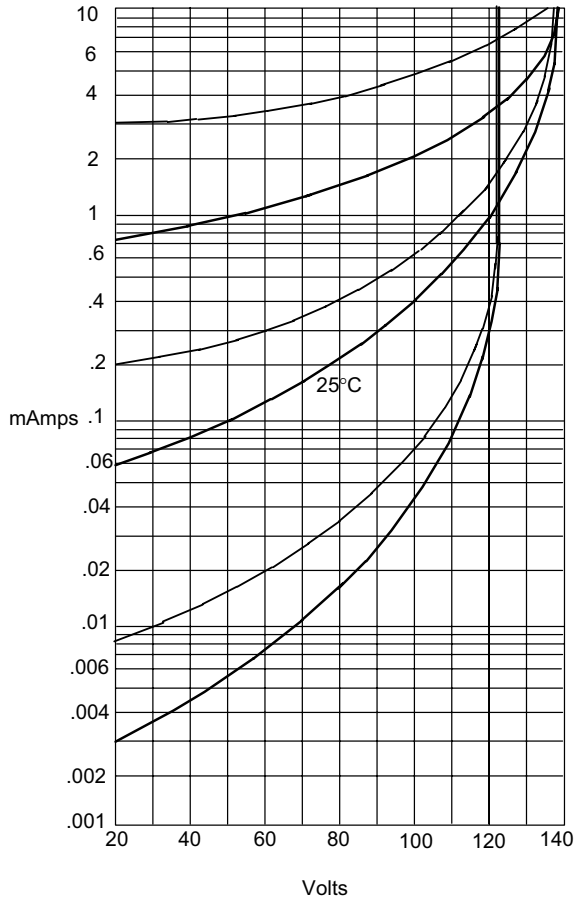


Junction Capacitance - pF versus
Reverse Voltage - Volts

SK32A thru SK310A

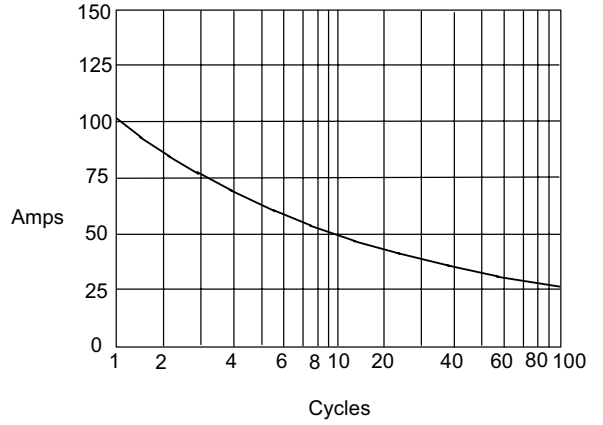
TM

Figure 4
Typical Reverse Characteristics



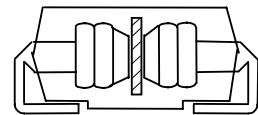
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



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

Figure 6
New SMA Assembly



Round Lead

Ordering Information

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

▪

▪

