



Micro Commercial Components

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

SR105 THRU SR1010

Features

- Guard Ring Protection
- Low Power Loss For High Efficiency
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Maximum Thermal Resistance; 30 °C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SR105 | SR105 | 50V | 35V | 50V |
| SR106 | SR106 | 60V | 42V | 60V |
| SR108 | SR108 | 80V | 56V | 80V |
| SR1010 | SR1010 | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

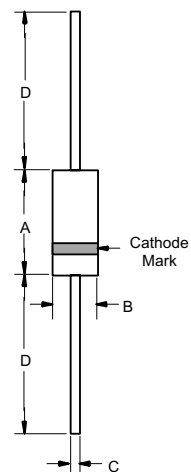
| | | | |
|--|-------------|---------------|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_A = 75^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage SR105-SR106 SR108-SR1010 | V_F | .70V .85V | $I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 0.5mA 10mA | $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ |

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

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

1 Amp Schottky Barrier Rectifier 50 - 100 Volts

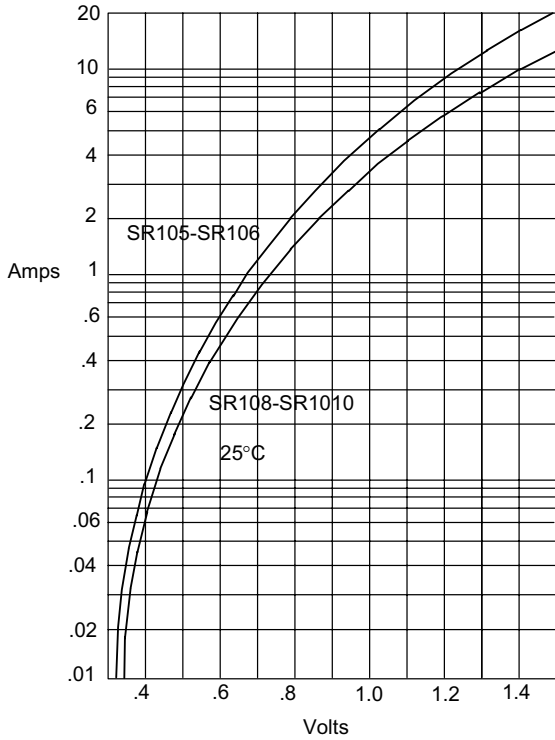
DO-41



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .166 | .205 | 4.10 | 5.20 | |
| B | .080 | .107 | 2.00 | 2.70 | |
| C | .028 | .034 | .70 | .90 | |
| D | 1.000 | --- | 25.40 | --- | |

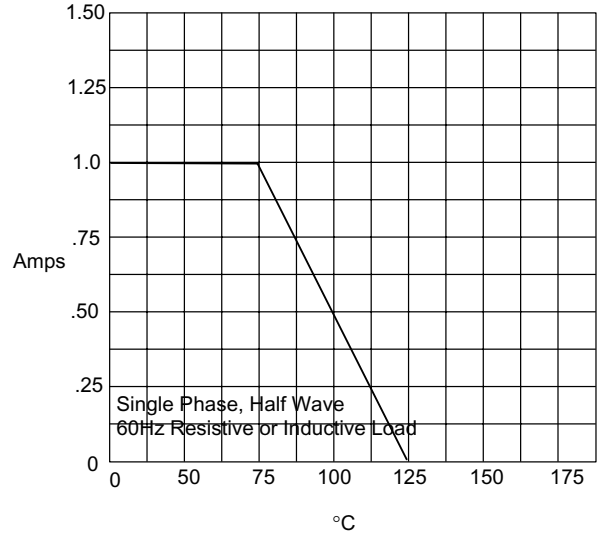
SR105 thru SR1010

Figure 1
Typical Forward Characteristics



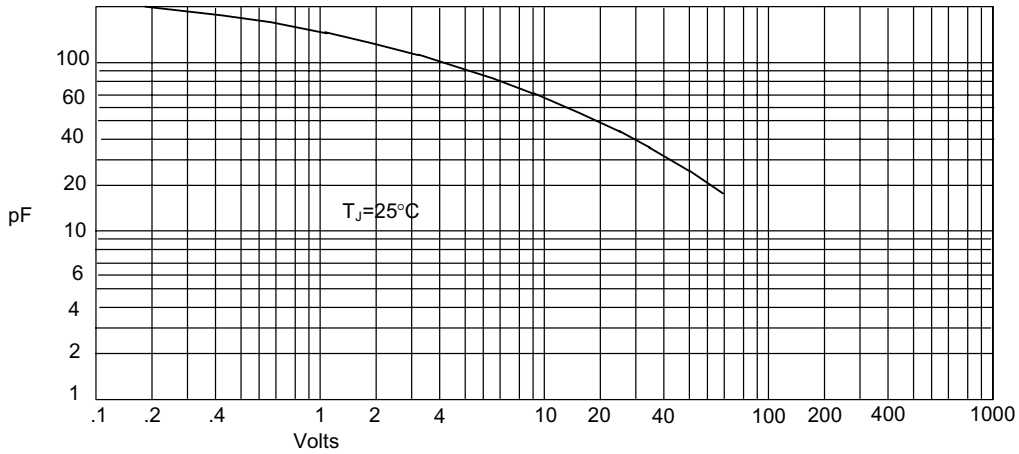
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



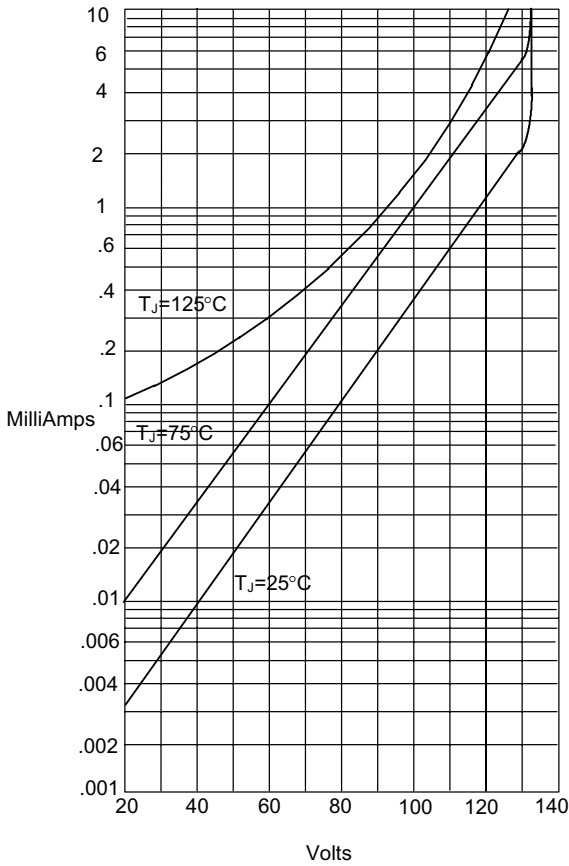
Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



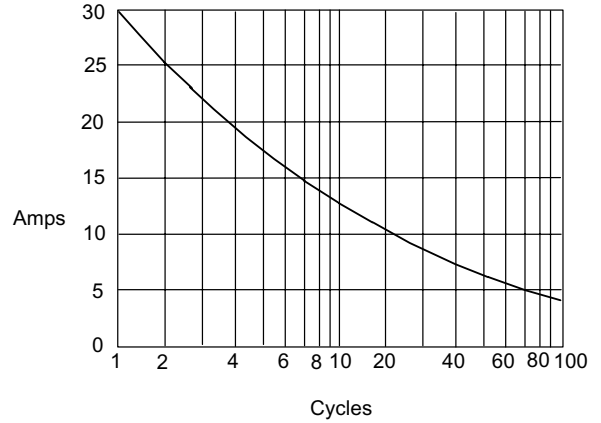
Junction Capacitance - pF versus
Reverse Voltage - Volts

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



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Ordering Information :

| Device | Packing |
|----------------|------------------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton |

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