

**NOT RECOMMENDED FOR NEW DESIGNS
USE SS12E-TP~SS110E-TP SERIES**



Micro Commercial Components



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SS12 THRU SS110

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Forward Voltage
- Guard Ring Protection
- High Current Capability
- 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 +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| SS12 | SS12 | 20V | 14V | 20V |
| SS13 | SS13 | 30V | 21V | 30V |
| SS14 | SS14 | 40V | 28V | 40V |
| SS15 | SS15 | 50V | 35V | 50V |
| SS16 | SS16 | 60V | 42V | 60V |
| SS18 | SS18 | 80V | 56V | 80V |
| SS110 | SS110 | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

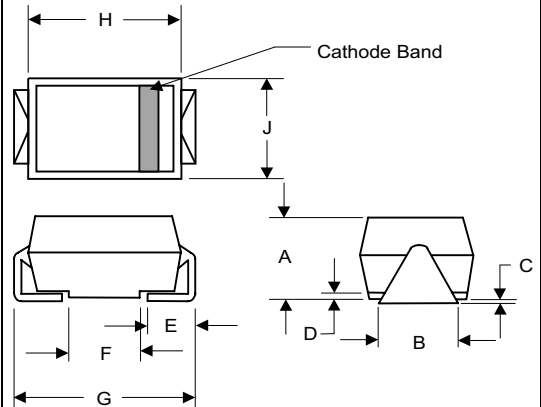
| | | | |
|---|-------------|--|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_J = 100^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | SS12 .45V SS13 .55V SS14 .60V SS15-16 .70V SS18-110 .85V | $I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 0.5mA 20mA | $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 110pF 30pF | Measured at 1.0MHz, $V_R=4.0V$ |

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

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

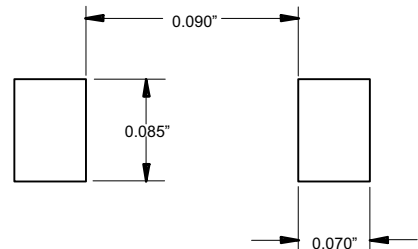
1 Amp Schottky Rectifier 20 to 100 Volts

DO-214AC (SMA) (High Profile)



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|------|
| | INCHES | | MM | | |
| 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

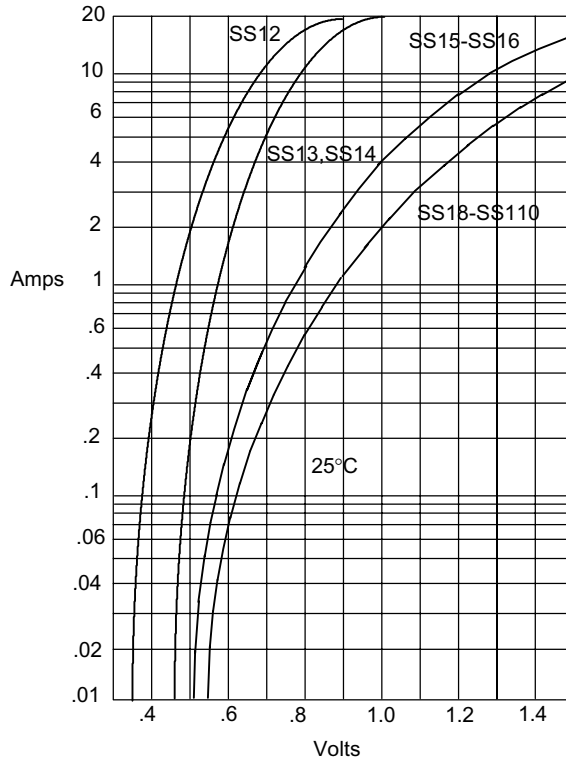


SS12 thru SS110



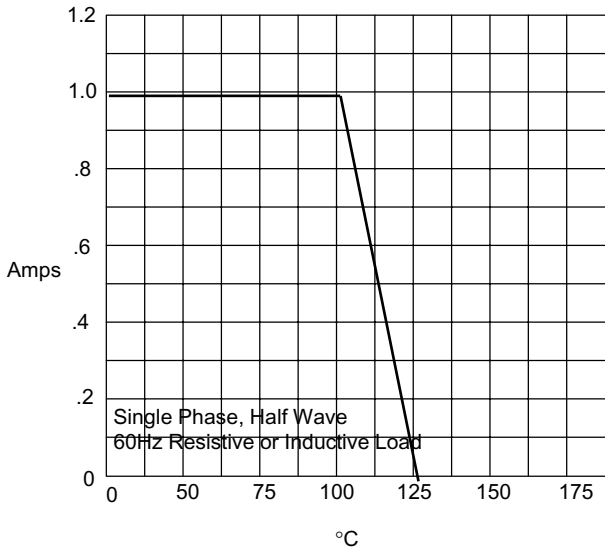
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Figure 1
Typical Forward Characteristics



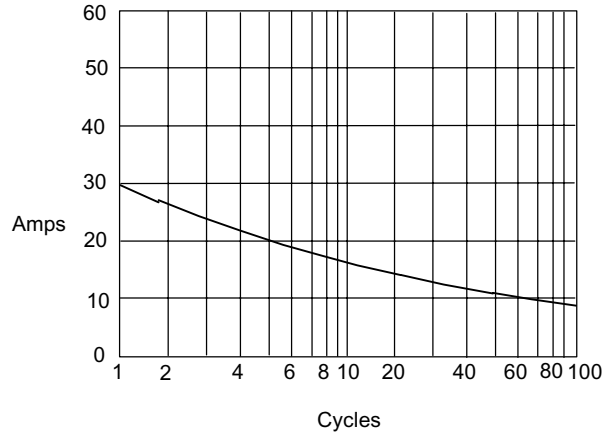
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Peak Forward Surge Current



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



TM

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Ordering Information :

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

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