

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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SS12E THRU SS110E

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 +150°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 | Maximum RMS | Maximum DC |
|--------------------------|-------------------|--------------------------------------|----------------|---------------------|
| Number | | Voltage | Voltage | Blocking Voltage |
| SS12E | SS12 | 20V | 14V | 20V |
| SS13E | SS13 | 30V | 21V | 30V |
| SS14E | SS14 | 40V | 28V | 40V |
| SS15E | SS15 | 50V | 35V | 50V |
| SS16E | SS16 | 60V | 42V | 60V |
| SS18E | SS18 | 80V | 56V | 80V |
| SS110E | SS110 | 100V | 70V | 100V |

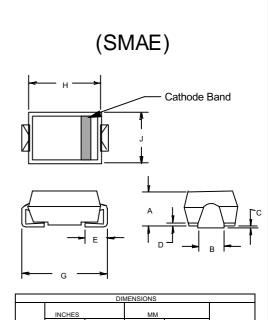
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | $I_{F(AV)}$ | 1.0A | T _L = 100°C |
|-------------------------------|------------------|-------|------------------------------|
| Peak Forward Surge Current | I _{FSM} | 30A | 8.3ms, half sine |
| Maximum | | | |
| Instantaneous | | | |
| Forward Voltage | | | |
| | V_{F} | | $I_{FM} = 1.0A;$ |
| | | | $T_J = 25^{\circ}C^*$ |
| SS12E~14E | | .60V | |
| SS15E~16E | | .70V | |
| SS18E-110E | | .85V | |
| Maximum DC | | | |
| Reverse Current At | I_R | 0.5mA | $T_A = 25^{\circ}C$ |
| Rated DC Blocking | | 20mA | T _A = 100°C |
| Voltage | | | ^ |
| Typical Junction | | | |
| Capacitance | | | |
| SS12E - SS16E | CJ | 110pF | Measured at |
| SS18E-SS110E | | 30pF | 1.0MHz, V _R =4.0V |

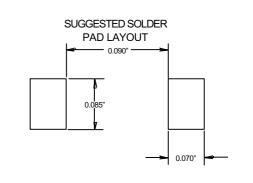
^{*}Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

1 Amp Schottky Rectifier 20 to 100 Volts



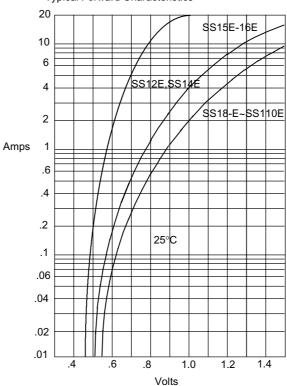
| DIMENSIONS | | | | | | |
|------------|--------|------|------|------|------|--|
| | INCHES | | MM | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .079 | .096 | 2.01 | 2.44 | | |
| В | .050 | .075 | 1.27 | 1.90 | | |
| С | .002 | .008 | .05 | .20 | | |
| D | | .02 | | .51 | | |
| E | .030 | .060 | .76 | 1.52 | | |
| G | .189 | .208 | 4.80 | 5.30 | | |
| Н | .157 | .180 | 4.00 | 4.57 | | |
| J | .090 | .115 | 2.29 | 2.92 | | |



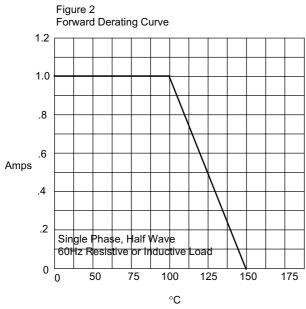
SS12E thru SS110E



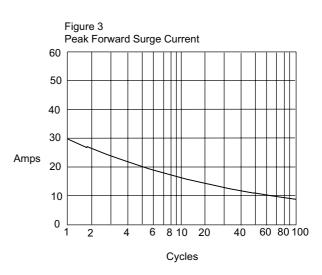
Figure 1
Typical Forward Characteristics



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



Average Forward Rectified Current - Amperes/ersus Lead Temperature -°C



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



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Ordering Information:

| Device | Packing | |
|----------------|-----------------------|--|
| Part Number-TP | Tape&Reel: 6Kpcs/Reel | |

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Micro Commercial Components (MCC): SS12E-TP SS16E-TP