

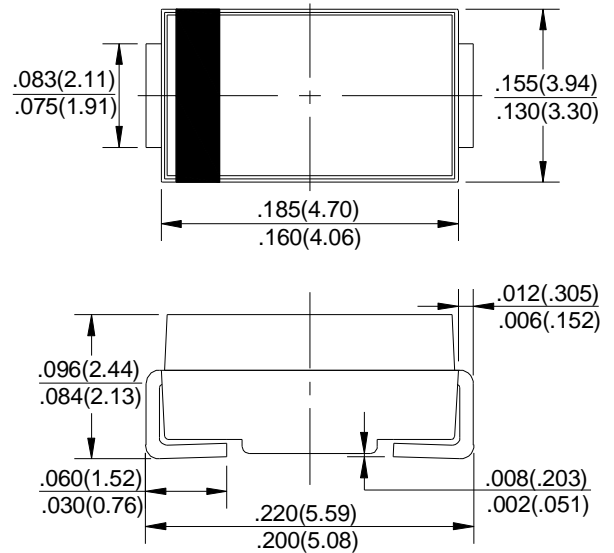
CURRENT 1.0 Ampere
 VOLTAGE RANG 20 to 200 Volts

SS12B THRU SS120B

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

DO-214AA (SMB)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
 Terminals: leads solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight: 0.003 ounce, 0.093 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Catalog Number | SYMBOLS | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS110 | SS115 | SS120 | UNITS | |
|---|-----------------|-------------|------|------|------|------|-------------|-------|-------|-------|-------|----|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS | |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | VOLTS | |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS | |
| Maximum average forward rectified current at T_L (see fig.1) | $I_{(AV)}$ | 1.0 | | | | | | | | | Amp | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30.0 | | | | | | | | | Amps | |
| Maximum instantaneous forward voltage at 1.0A | V_F | 0.45 | 0.55 | 0.70 | | | 0.85 | | 0.95 | | Volts | |
| Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$ | I_R | 0.5 | | | | | | 0.2 | | | mA | |
| | | 10.0 | | | 5.0 | | 2.0 | | | | | |
| Typical junction capacitance (NOTE 1) | C_J | 110 | | | 90 | | | | | | pF | |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 88.0 | | | | | | | | | °C/W | |
| Operating junction temperature range | T_J | -50 to +125 | | | | | -50 to +150 | | | | | °C |
| Storage temperature range | T_{STG} | -50 to +150 | | | | | | | | | °C | |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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RATING AND CHARACTERISTIC CURVES SS12 Thru SS120

