

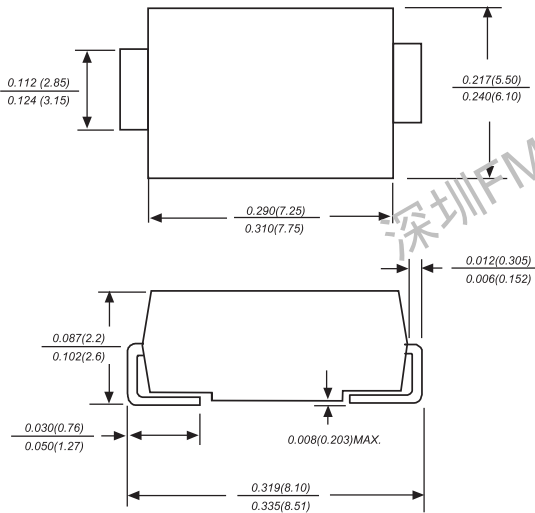
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Formosa MS

SS82 THRU SS810

Reverse Voltage -20 to 100 Volts Forward Current - 8.0 Amperes

SMC/DO-214AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.008 ounce, 0.217 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%.

| | SYMBOLS | SS 82 | SS 83 | SS 84 | SS 85 | SS 86 | SS 87 | SS 88 | SS 89 | SS 810 | UNITS |
|-----------------------------------------------------------------------------------------------------|-----------------|-------------|-------|-------|-------------|-------|-------|-------|-------|--------|-------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | VOLTS |
| Maximum average forward rectified current (see fig.1) | $I_{(AV)}$ | 8.0 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 8.0A | V_F | 0.55 | | 0.7 | | 0.85 | | | | Volts | |
| Maximum DC reverse current at rated DC blocking voltage | I_R | 1.0 | | 15.0 | | 50.0 | | | | mA | |
| Typical junction capacitance (NOTE 1) | C_J | 550 | | 450 | | | | pF | | | |
| Typical thermal resistance (NOTE 2) | $R_{\theta JC}$ | 2.0 | | | | | | | | | °C/W |
| Operating junction temperature range | T_J | -65 to +125 | | | -65 to +150 | | | | | | °C |
| Storage temperature range | T_{STG} | -65 to +150 | | | | | | | | | °C |

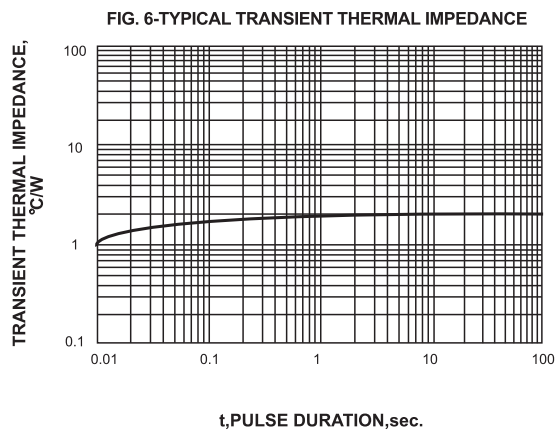
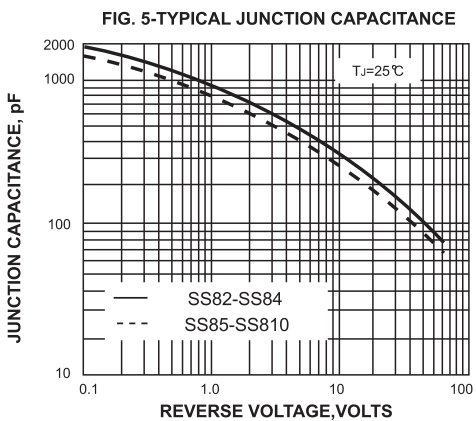
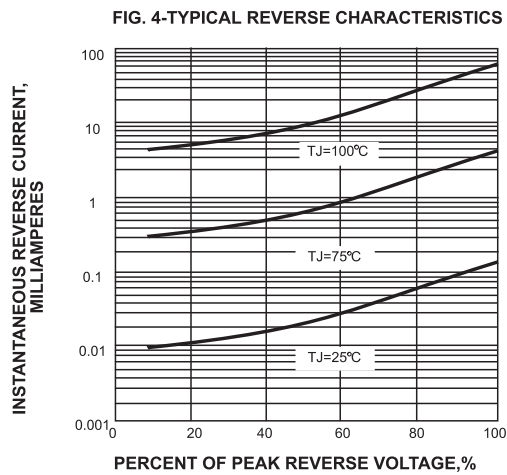
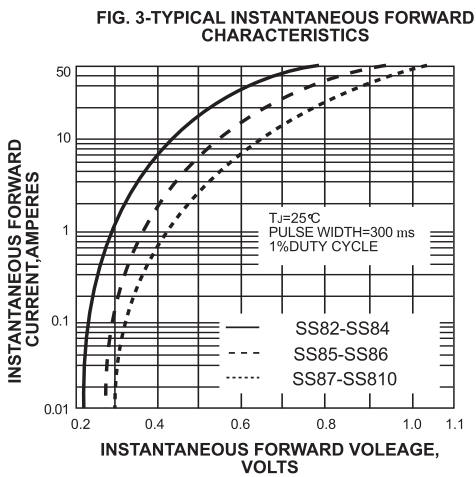
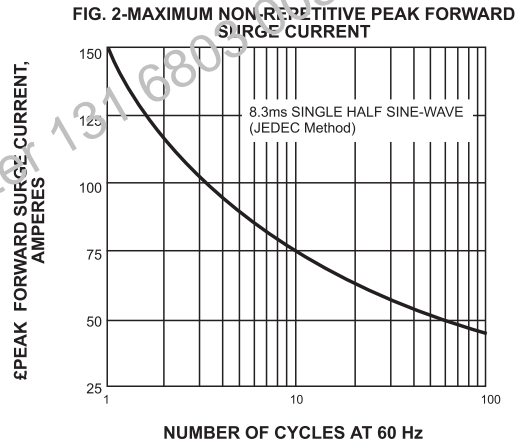
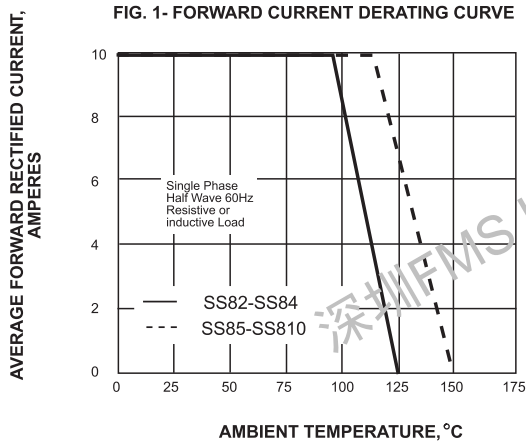
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.6x0.6" (16x16mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES SS82 THRU SS810

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