

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

SS52C-MS THRU SS5200C-MS

Product specification


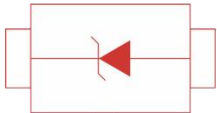
Features

- 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



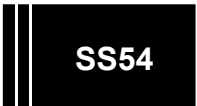
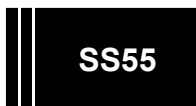
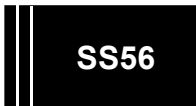

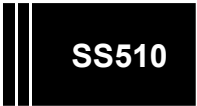
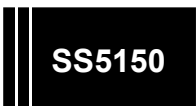
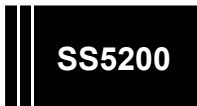
MECHANICAL DATA

- Case : JEDEC DO-214AB/SMC molded plastic body
- Terminals : Solderable per MIL-STD-750,Method 2026
- Polarity : Color band denotes cathode end Mounting
- Position: Any
- Weight : 0.0077 ounce, 0.22 grams

Reference News

| SMC(DO-214AB) | Schematic Diagram |
|--|---|
|  |  |

Marking

| SS52C-MS | SS53C-MS | SS54C-MS | SS55C-MS | SS56C-MS |
|---|---|---|--|--|
|  |  |  |  |  |
| SS58C-MS | SS510C-MS | SS5150C-MS | SS5200C-MS | |
|  |  |  |  | |

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%.

| Parameter | SYMBOLS | SS52C-MS | SS53C-MS | SS54C-MS | SS55C-MS | SS56C-MS | SS58C-MS | SS510C-MS | SS5150C-MS | SS5200C-MS | UNITS | |
|---|-------------------|-------------|----------|----------|----------|----------|-------------|-----------|------------|------------|-------|----|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V | |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | V | |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V | |
| Maximum average forward rectified current | I _(AV) | 5.0 | | | | | | | | | A | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 175 | | | | | | 150 | | | A | |
| Maximum instantaneous forward voltage at 5.0A | V _F | 0.55 | | | 0.70 | | 0.85 | | | | V | |
| Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =100℃ | I _R | 1.0 50 | | | | | | | | | mA | |
| Typical junction capacitance (NOTE 1) | C _J | 600 | | | 400 | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | R _{θJA} | 35 | | | | | | | | | ℃/W | |
| Operating junction temperature range | T _J | -55 to +125 | | | | | -55 to +150 | | | | ℃ | |
| Storage temperature range | T _{STG} | -55 to +150 | | | | | | | | | ℃ | |

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

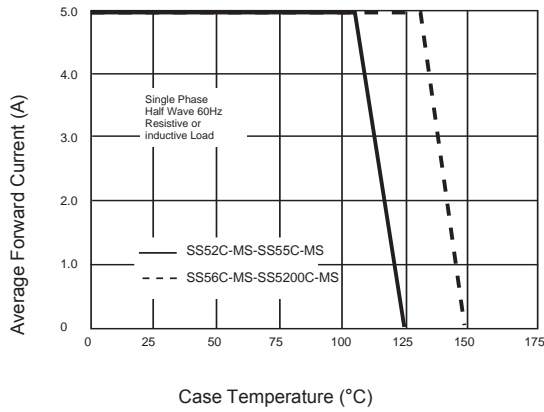


Fig.2 Typical Reverse Characteristics

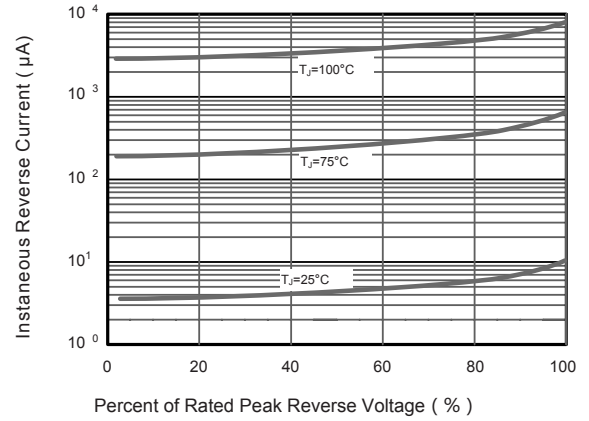


Fig.3 Typical Forward Characteristic

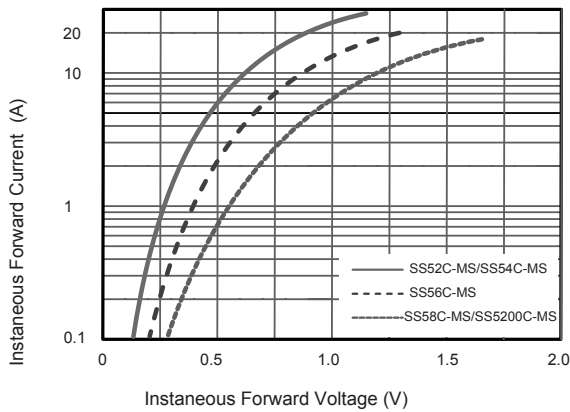


Fig.4 Typical Junction Capacitance

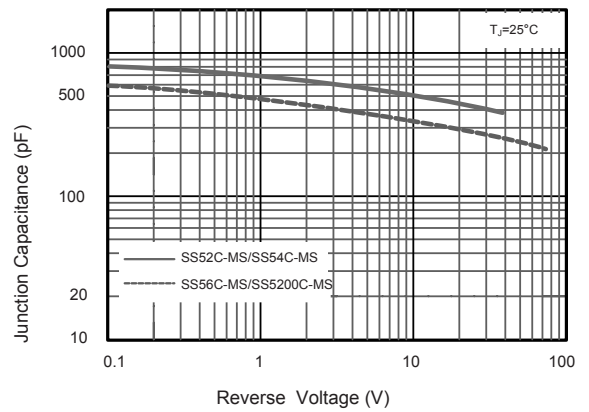


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

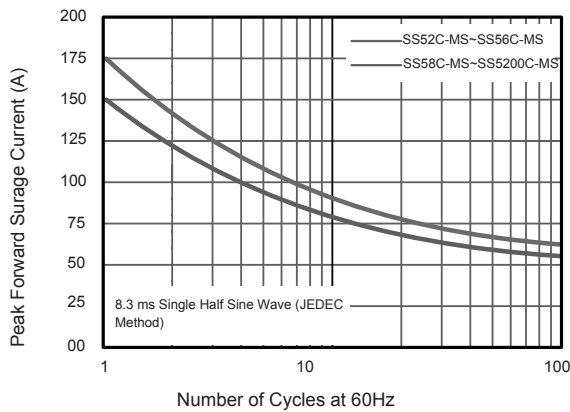
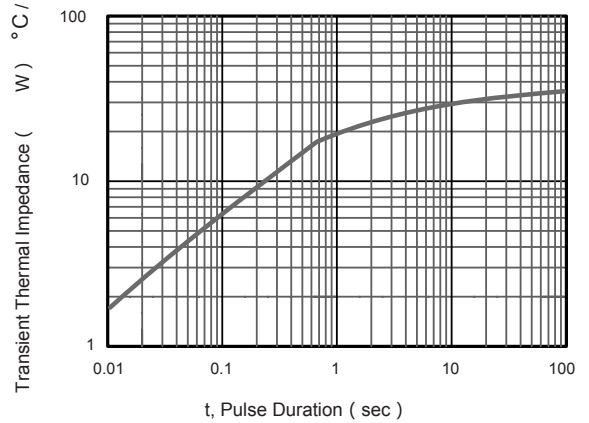
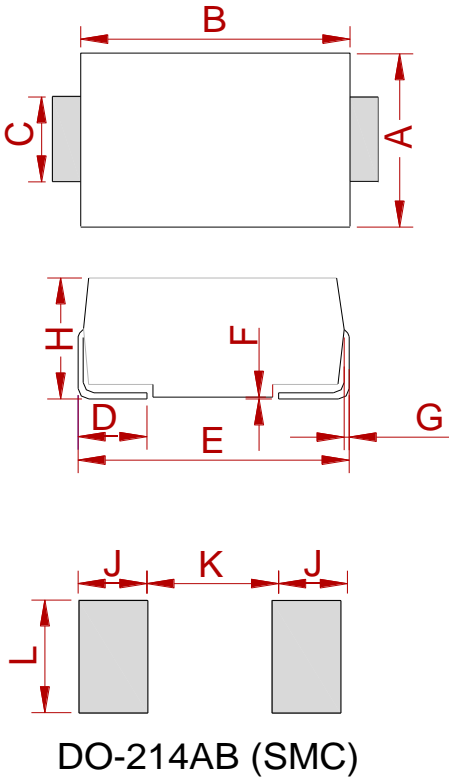


Fig.6 Typical Transient Thermal Impedance



PACKAGE MECHANICAL DATA



| Ref. | Dimensions | | | |
|------|-------------|-------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 5.75 | 6.25 | 0.226 | 0.246 |
| B | 6.90 | 7.40 | 0.272 | 0.291 |
| C | 2.75 | 3.25 | 0.108 | 0.128 |
| D | 0.95 | 1.52 | 0.037 | 0.060 |
| E | 7.70 | 8.20 | 0.303 | 0.323 |
| F | 0.051 | 0.203 | 0.002 | 0.008 |
| G | 0.15 | 0.31 | 0.006 | 0.012 |
| H | 2.15 | 2.62 | 0.085 | 0.103 |
| J | 2.40 | | 0.094 | |
| K | | 4.20 | | 0.165 |
| L | 3.30 | | 0.130 | |

REEL SPECIFICATION

| P/N | PKG | QTY |
|--------------------------|-----|------|
| SS52C-MS THRU SS5200C-MS | SMC | 3000 |

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