

MSKSEMI 美森科

SEMICONDUCTOR



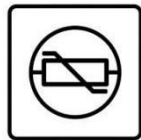
ESD



TVS



TSS



MOV



GDT



PLED

SS22B-MS THRU SS210B-MS

Product specification


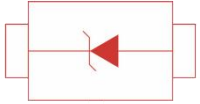
Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable
Per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.093 grams (approx.)

Reference News

| SMB(DO-214AA) | Schematic Diagram |
|--|---|
|  |  |

Marking

| SS22B-MS | SS23B-MS | SS24B-MS | SS25B-MS |
|---|---|--|--|
|  |  |  |  |
| SS26B-MS | SS28B-MS | SS210B-MS | |
|  |  |  | |

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | SS22B-MS | SS23B-MS | SS24B-MS | SS25B-MS | SS26B-MS | SS28B-MS | SS210B-MS | Unit |
|---|-------------------|-------------|----------|----------|-------------|----------|----------|-----------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum average forward rectified current at T _L (see fig.1) | I _(AV) | 2.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 50.0 | | | | | | | A |
| Maximum instantaneous forward voltage at 2.0A | V _F | 0.55 | | 0.70 | | 0.85 | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I _R | 0.5 | | | | | | | mA |
| <small>T_A=25°C</small> <small>T_A=100°C</small> | | 20 | | | 10 | | | | |
| Typical junction capacitance (NOTE 1) | C _J | 220 | | | 180 | | | | pF |
| Typical thermal resistance (NOTE 2) | R _{θJA} | 75.0 | | | | | | | °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 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS22B-MS THRU SS210B-MS

FIG. 1- FORWARD CURRENT DERATING CURVE

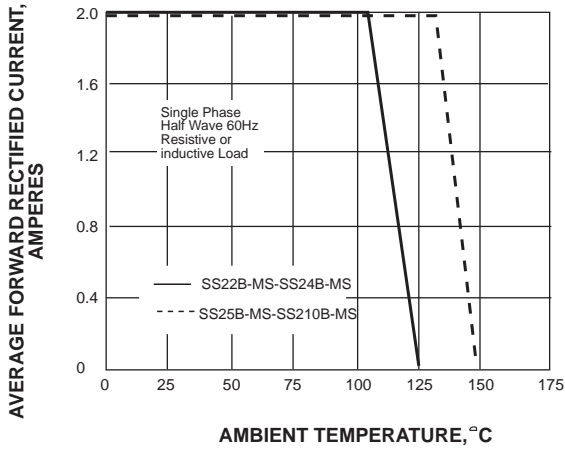


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

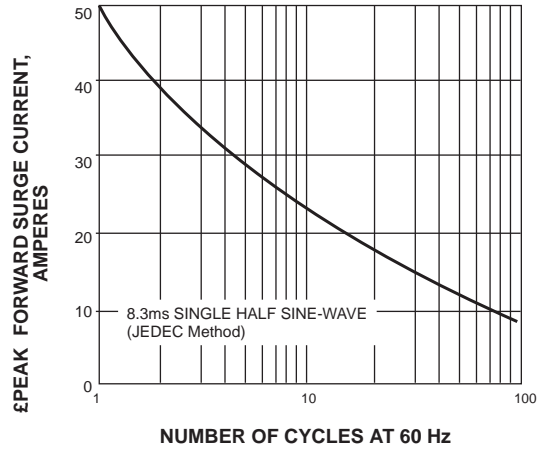


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

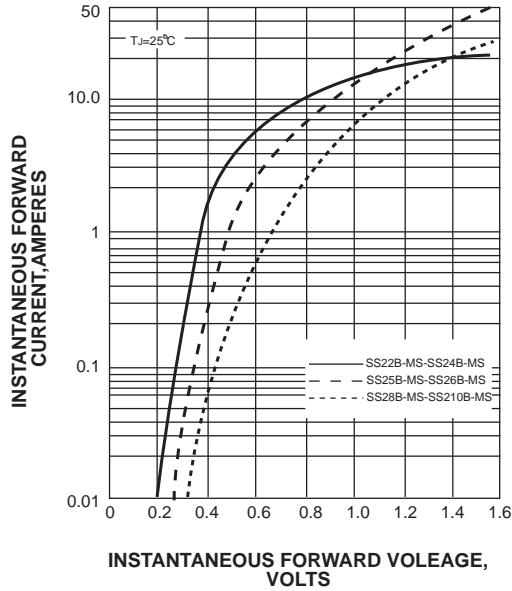


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

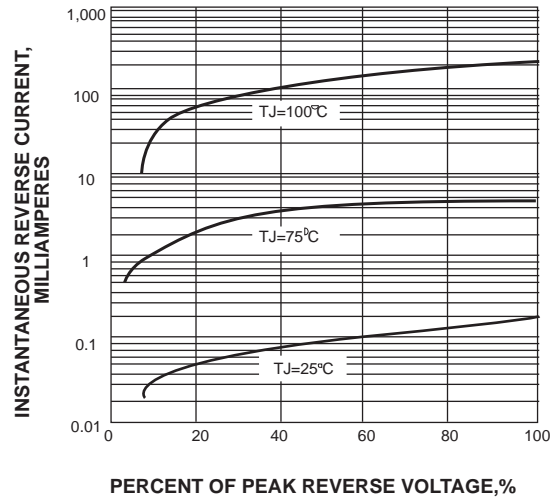


FIG. 5-TYPICAL JUNCTION CAPACITANCE

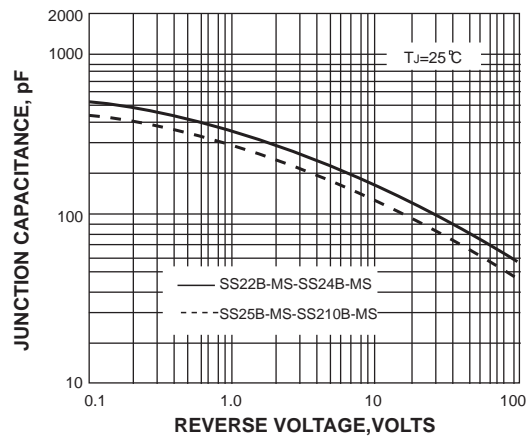
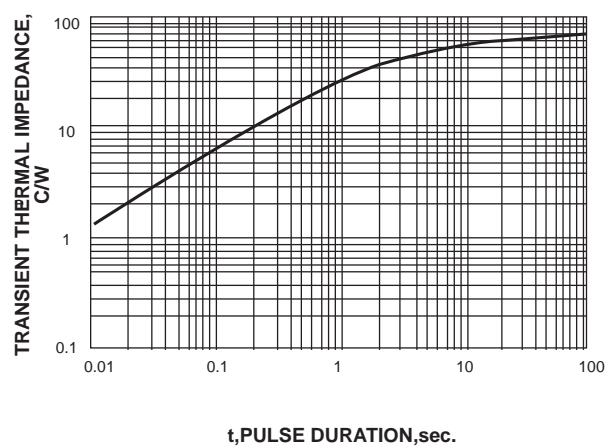
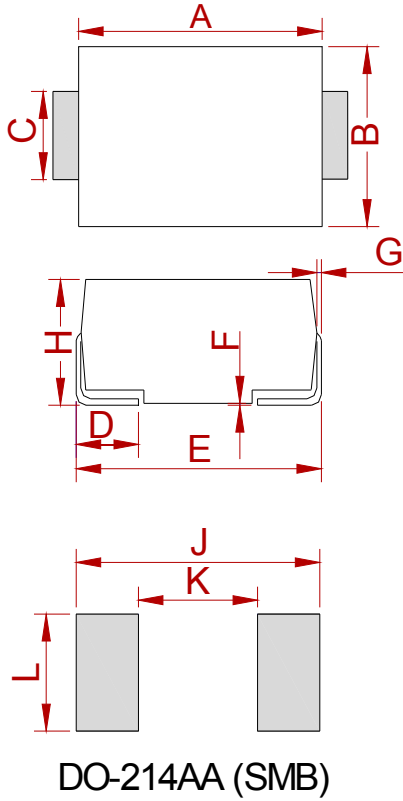


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



PACKAGE MECHANICAL DATA



| Ref. | Dimensions | | | |
|------|-------------|-------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 4.25 | 4.75 | 0.167 | 0.187 |
| B | 3.30 | 3.94 | 0.130 | 0.155 |
| C | 1.85 | 2.21 | 0.073 | 0.087 |
| D | 0.76 | 1.52 | 0.030 | 0.060 |
| E | 5.08 | 5.59 | 0.200 | 0.220 |
| F | 0.051 | 0.203 | 0.002 | 0.008 |
| G | 0.15 | 0.31 | 0.006 | 0.012 |
| H | 2.11 | 2.44 | 0.083 | 0.096 |
| J | 6.80 | | 0.270 | |
| K | | 2.60 | | 0.100 |
| L | 2.40 | | 0.090 | |

REEL SPECIFICATION

| P/N | PKG | QTY |
|-------------------------|---------------|------|
| SS22B-MS THRU SS210B-MS | DO-214AA(SMB) | 3000 |

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