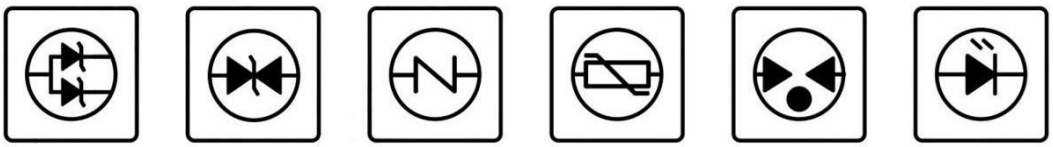
MSKSEMI 美森科
SEMICONDUCTOR




# SS1150-MS THRU SS1200-MS

**Product specification**

# SS1150-MS THRU SS1200-MS

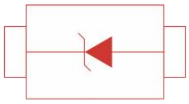
## Features

- 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: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (approx.)

## Reference News

| DO-214AC/SMA | Schematic Diagram |
|---|---|
|  |  |

## Marking

| SS1150-MS | SS1200-MS |
|---|---|
| SS115 | SS120 |

## Maximum Ratings and Electrical Characteristics

$T_A$ = 25℃ unless otherwise specified

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

| Characteristic | | Symbol | SS1150-MS | SS1200-MS | Unit |
|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | | $V_{RRM}$ | 150 | 200 | Volts |
| Maximum RMS voltage | | $V_{RMS}$ | 105 | 140 | Volts |
| Maximum DC blocking voltage | | $V_{DC}$ | 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 | | $V_F$ | 0.85 | 0.95 | Volts |
| Maximum DC reverse current at rated DC blocking voltage | $T_A$=25℃ | $I_R$ | 0.2 | | mA |
| | $T_A$=100℃ | | 2.0 | | |
| Typical junction capacitance (NOTE 1) | | $C_J$ | 90 | | pF |
| Typical thermal resistance (NOTE 2) | | $R_{\theta JA}$ | 88.0 | | °C/W |
| Operating junction temperature range | | $T_J$, | -50 to +150 | | ℃ |
| Storage temperature range | | $T_{STG}$ | -50 to +150 | | ℃ |

**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 SS1150-MS THRU SS1200-MS

FIG. 1- FORWARD CURRENT DERATING CURVE

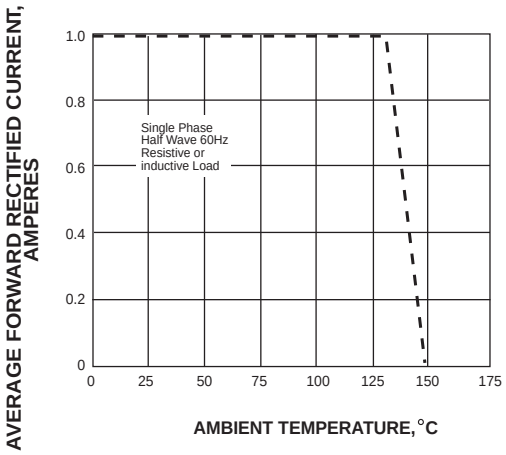



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

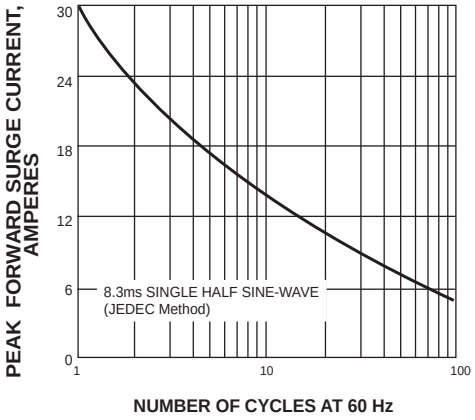



FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

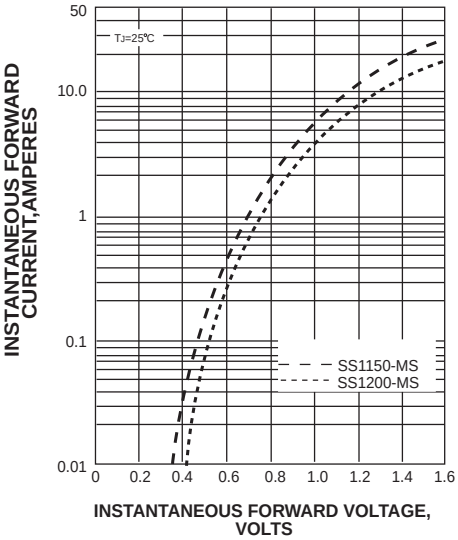



FIG. 4-TYPICAL REVERSE CHARACTERISTICS

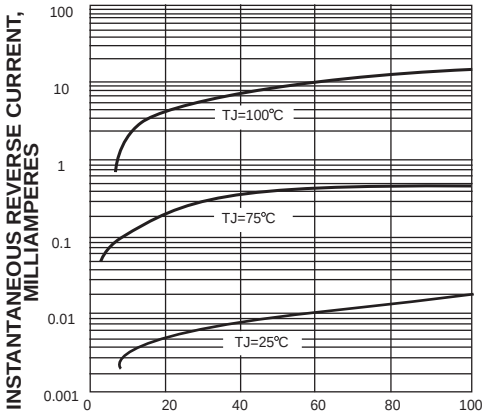



FIG. 5-TYPICAL JUNCTION CAPACITANCE

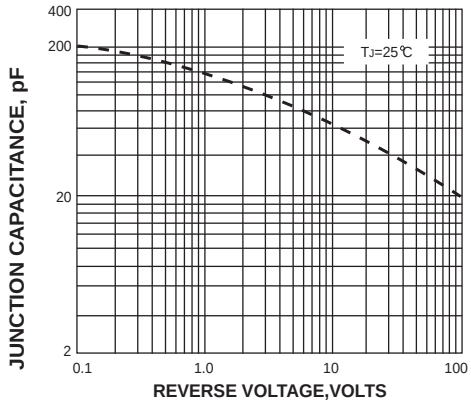
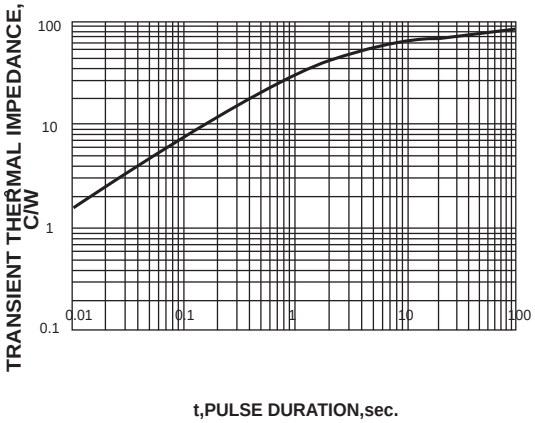
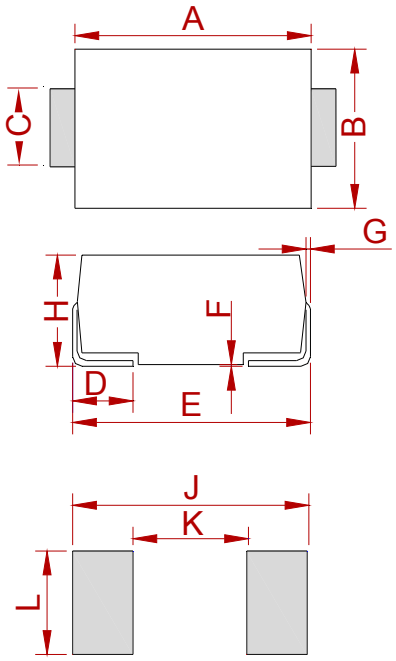



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



## PACKAGE MECHANICAL DATA




DO-214AC (SMA)

| Ref. | Dimensions | | | |
|---|---|---|---|---|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 4.25 | 4.65 | 0.167 | 0.183 |
| B | 2.50 | 2.90 | 0.098 | 0.114 |
| C | 1.35 | 1.65 | 0.053 | 0.065 |
| D | 0.76 | 1.52 | 0.030 | 0.060 |
| E | 4.93 | 5.28 | 0.194 | 0.208 |
| F | 0.051 | 0.203 | 0.002 | 0.008 |
| G | 0.15 | 0.31 | 0.006 | 0.012 |
| H | 1.98 | 2.41 | 0.078 | 0.095 |
| J | 6.50 | | 0.256 | |
| K | | 2.30 | | 0.090 |
| L | 1.70 | | 0.067 | |

## REEL SPECIFICATION

| P/N | PKG | QTY |
|---|---|---|
| SS1150-MS THRU SS1200-MS | SMA(DO-214AC) | 2000 |

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