

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## SSL54-MS

Product specification

FEATURES


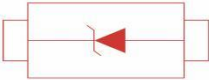
- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

MACHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any

- VOLTAGE RANGE  
40 Volts
- CURRENT  
5.0 Ampere

Reference News

| PACKAGE OUTLINE  | PIN CONFIGURATION  | Marking          |
|--|--|------------------|
| <div></div> <div>SMBF</div> | <div></div> | <div>SSL54</div> |

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| TYPE NUMBER   | SSL54-MS   | UNITS |
|---|------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | 40         | V     |
| Maximum RMS Voltage   | 28         | V     |
| Maximum DC Blocking Voltage   | 40         | V     |
| Maximum Average Forward Rectified Current<br>See Fig. 1   | 5.0        | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 120        | A     |
| Maximum Instantaneous Forward Voltage at 5.0A   | 0.46       | V     |
| Ta=25 C   | 1.0        | mA    |
| Ta=100°C  | 50         | mA    |
| Typical Junction Capacitance (Note1)  | 380        | pF    |
| Typical Thermal Resistance R <sub>JL</sub> (Note 2)   | 25         | C/W   |
| Operating Temperature Range T <sub>J</sub>  | -55 — +125 | °C    |
| Storage Temperature Range T <sub>STG</sub>  | -55 — +150 | C     |

### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (SSL54-MS )

FIG.1-FORWARD CURRENT DERATING CURVE

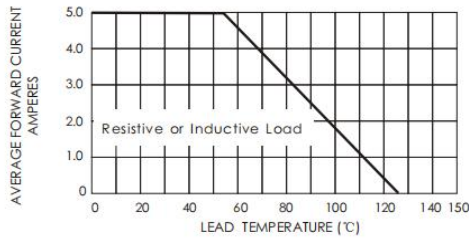


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

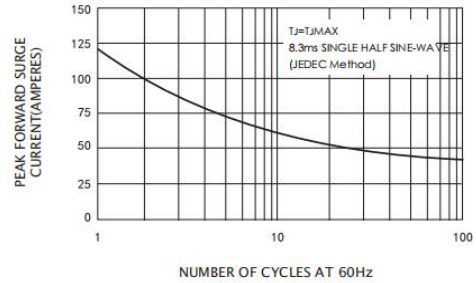


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

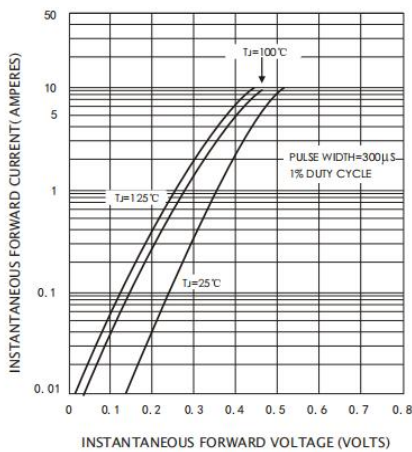


FIG.4-TYPICAL REVERSE CHARACTERISTICS

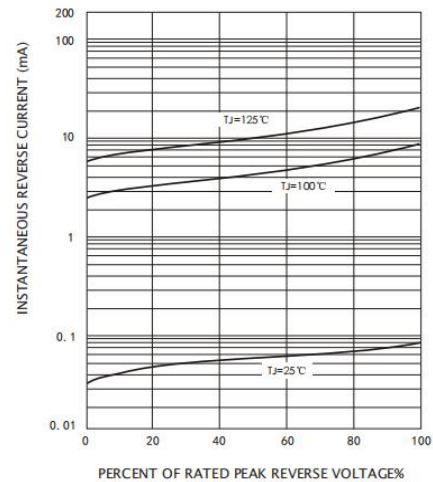
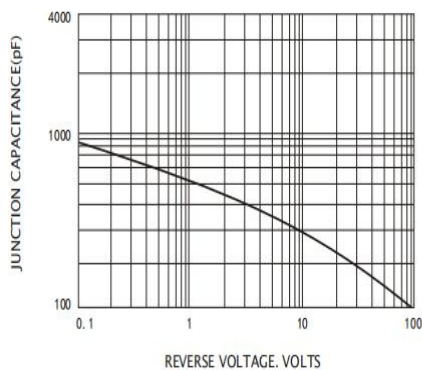
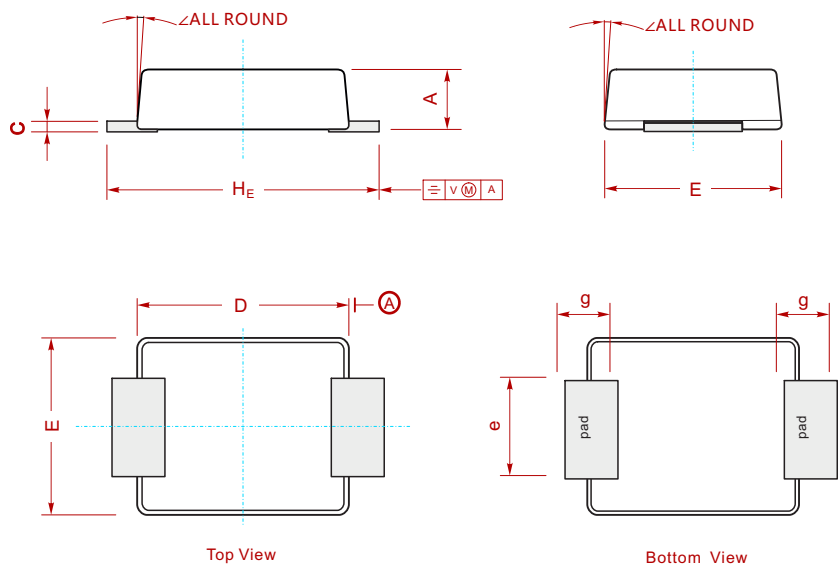


FIG.5-TYPICAL JUNCTION CAPACITANCE

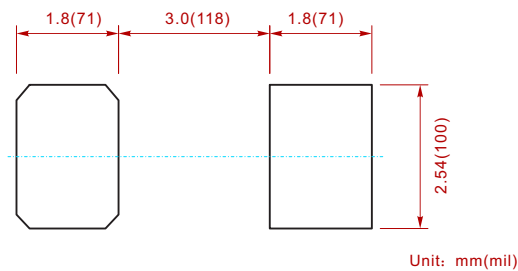


PACKAGE MECHANICAL DATA



| UNIT |     | A   | C    | D   | E   | H <sub>E</sub> | e   | g   | ∠  |
|------|-----|-----|------|-----|-----|----------------|-----|-----|----|
| mm   | max | 1.3 | 0.26 | 4.4 | 3.7 | 5.5            | 2.2 | 1.0 | 9° |
|      | min | 1.1 | 0.18 | 4.2 | 3.5 | 5.1            | 1.9 |     |    |
| mil  | max | 51  | 10   | 173 | 146 | 216            | 86  | 40  |    |
|      | min | 43  | 7    | 165 | 138 | 200            | 75  |     |    |

The recommended mounting pad size



REEL SPECIFICATION

| P/N      | PKG  | QTY  |
|----------|------|------|
| SSL54-MS | SMBF | 5000 |

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