



Features

- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Glass passivated chip junction
- ◆ High forward surge capability
- ◆ Super fast reverse recovery time

Mechanical Data

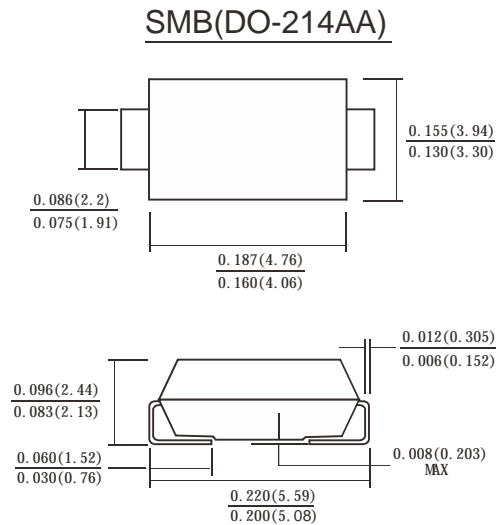
Case: SMB Molded plastic body

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

High temperature soldering guaranteed: 260°C/10 seconds

Polarity: Cathode line denotes the cathode end

Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

| Characteristic | Symbol | MURS160 | Units |
|---|--------|---------|-------|
| Peak repetitive reverse voltage | VRRM | 600 | V |
| RMS reverse voltage | VRMS | 420 | V |
| DC blocking voltage | VDC | 600 | V |
| Maximum average forward output current | IF(AV) | 1 | A |
| Peak forward surge current, 8.3ms single half-sine-wave, @TJ = 25°C | IFSM | 80 | A |
| Rating for fusing (t<8.3ms) | I2t | 26.7 | A2sec |
| Maximum instantaneous forward voltage @ 1A | VF | 1.25 | V |
| Maximum reverse recovery time (Note 1) | Trr | 35 | nS |
| Maximum Reverse current @TA =25°C | IR | 10 | μ A |
| Rated VR @TA =125°C | | 200 | |

Thermal Characteristics

| Characteristic | Symbol | MURS160 | Units |
|--------------------------------------|--------|-----------------|-------|
| Typical thermal resistance (Note 2) | R θJA | 75 | °C /W |
| | R θJL | 25 | |
| Operating junction temperature range | TJ | - 55 ---- + 150 | °C |
| Storage temperature range | TSTG | - 55 ---- + 150 | °C |

Note:

(1) IF=0.5A,IR=1A,IRR=0.25A

(2) Units mounted on P.C.B. with 8.0 x 8.0 mm land areas.



Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1-Forward Current Derating Curve

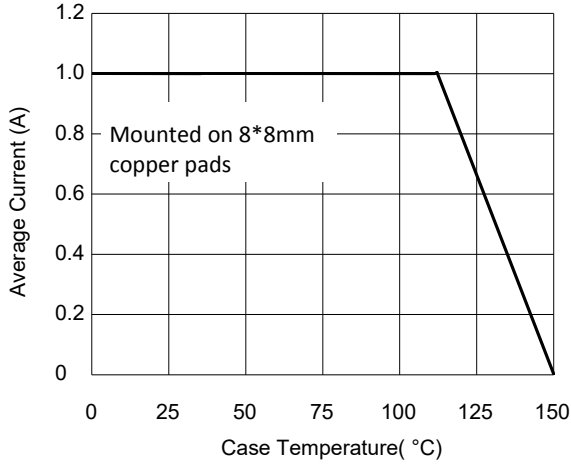


Fig.2- Surge Current Derating Curve

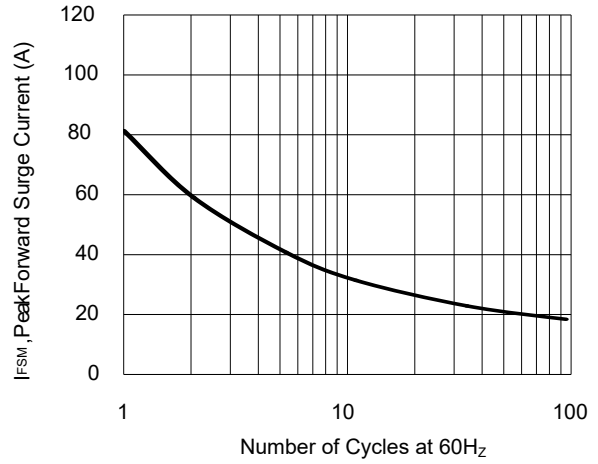


Fig.3- Typical Forward Voltage Characteristic

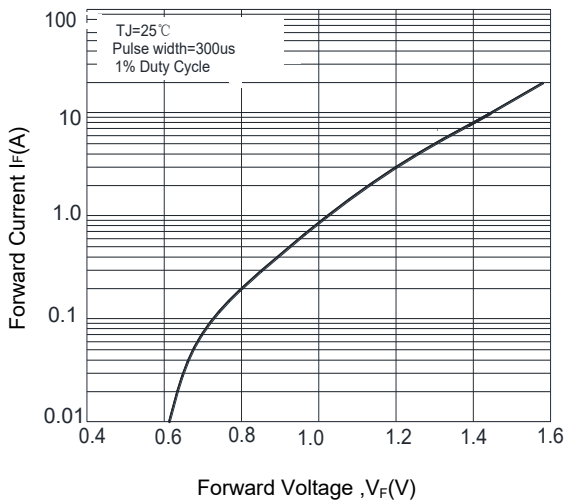


Fig.4- Typical Reverse Characteristic

