

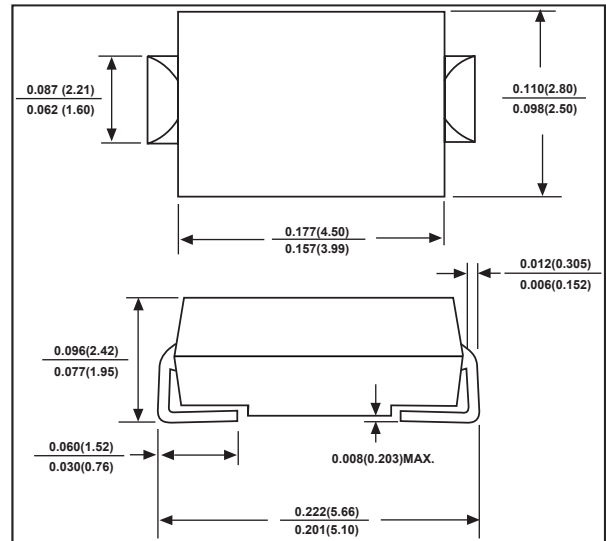
SMA Fast Recovery Rectifiers

FEATURES

- Fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability

MECHANICAL DATA

- Case style:SMA molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| CHARACTERISTICS | SYMBOL | RS1A | RS1B | RS1D | RS1G | RS1J | RS1K | RS1M | UNIT |
|--|--------|-------------|------|------|------|------|------|------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @TA=75°C | I(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | IFSM | 30 | | | | | | | A |
| Peak Forward Voltage at 1.0A DC | VF | 1.3 | | | | | | | V |
| Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C | IR | 5.0 | | | | | | | uA |
| | | 100 | | | | | | | |
| Maximum Reverse Recovery Time (Note1) | TRR | | 150 | | | 250 | 500 | | nS |
| Typical Junction Capacitance (Note2) | CJ | | 25 | | | | 15 | | pF |
| Typical Thermal Resistance (Note3) | RθJA | 25 | | | | | | | °C/W |
| Operating Temperature Range | TJ | -50 to +150 | | | | | | | °C |
| Storage Temperature Range | TSTG | -50 to +150 | | | | | | | °C |

NOTES: 1.Measured with IF=0.5A,IR=1A,IRR=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction of ambient.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 – FORWARD CURRENT DERATING CURVE

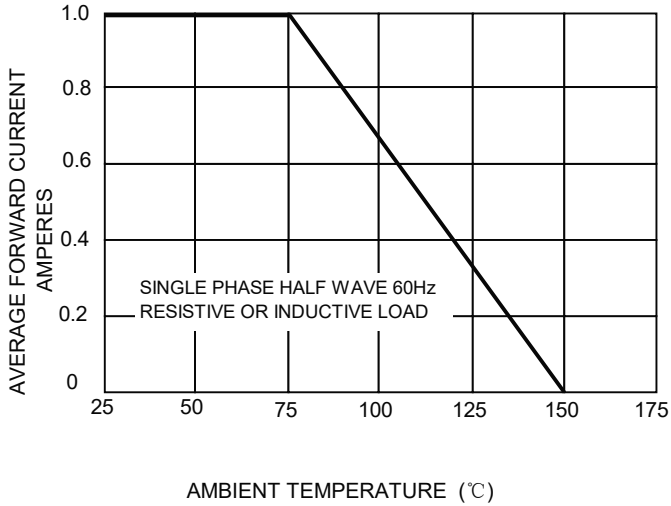


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

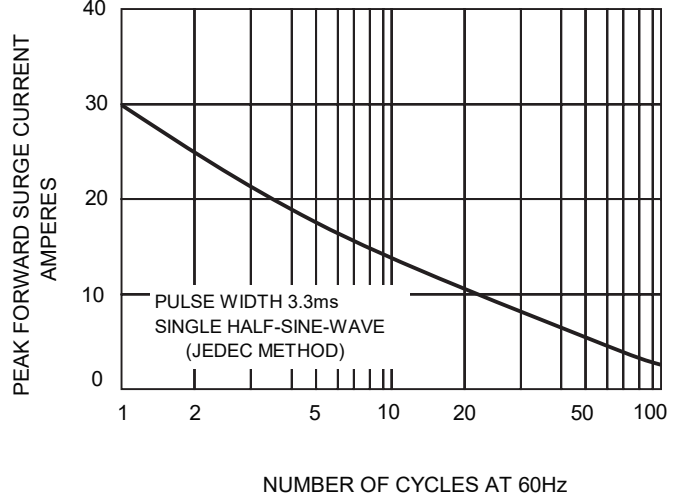


FIG.3 – TYPICAL JUNCTION CAPACITANCE

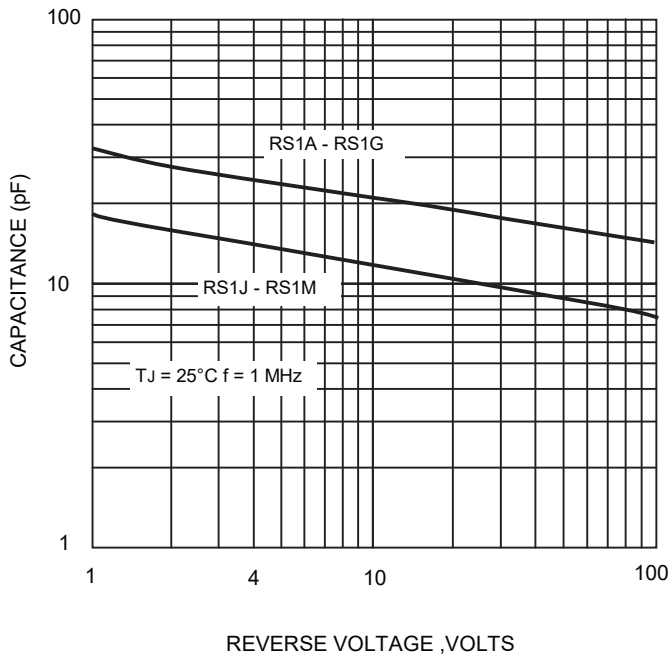


FIG.4-TYPICAL FORWARD CHARACTERISTICS

