

SSOA - SSOM

PRV : 50 - 1000 Volts
Io : 1.5 Amperes

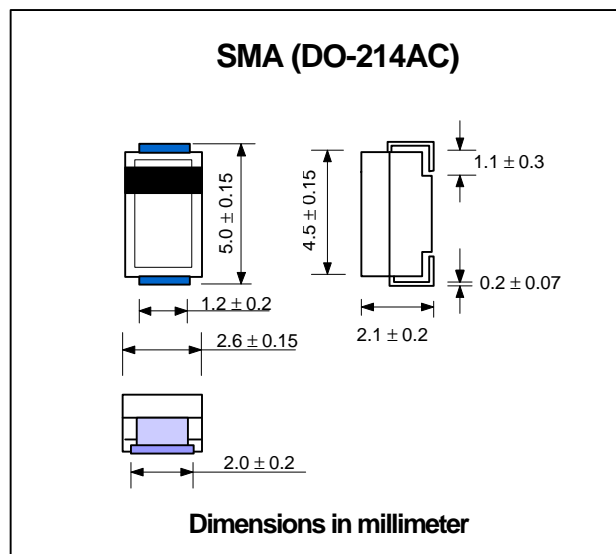
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast recovery time

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.064 gram

SURFACE MOUNT SUPER FAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

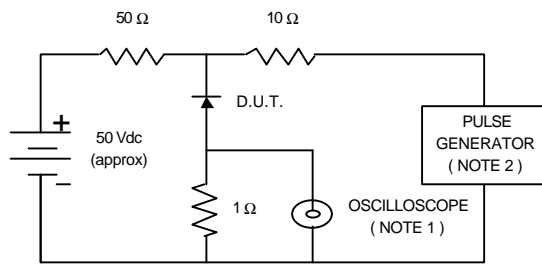
| RATING | SYMBOL | SSOA | SSOB | SSOC | SSOD | SSOE | SSOG | SSOJ | SSOK | SSOM | UNIT |
|--|--------|---------------|------|------|------|------|------|------|------|------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | VRMS | 35 | 70 | 105 | 140 | 210 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 150 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Current Ta = 55 °C | IF(AV) | 1.5 | | | | | | | | | Amps. |
| Peak Forward Surge Current 8.3 ms. Single half sine wave Superimposed on rated load (JEDEC Method) | IFSM | 60 | | | | | | | | | Amps. |
| Maximum Peak Forward Voltage at IF = 1.5 A. | VF | 0.95 | | | | 1.4 | | 1.7 | | | Volts |
| Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C | IR | 5 | | | | | | | | | μA |
| | IR(H) | 50 | | | | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 35 | | | | | | | | | ns |
| Typical Junction Capacitance (Note 2) | CJ | 50 | | | | | | | | | pf |
| Junction Temperature Range | TJ | - 65 to + 150 | | | | | | | | | °C |
| Storage Temperature Range | TSTG | - 65 to + 150 | | | | | | | | | °C |

Notes :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES (SSOA - SSOM)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

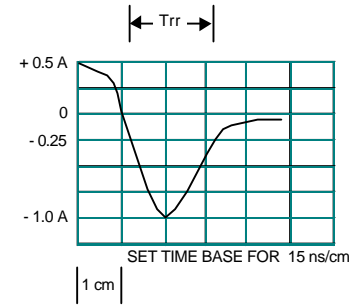


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

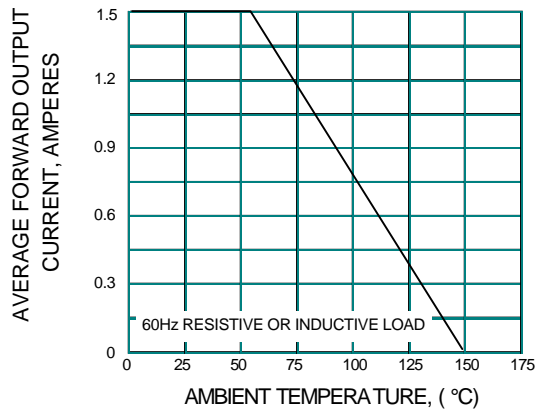


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

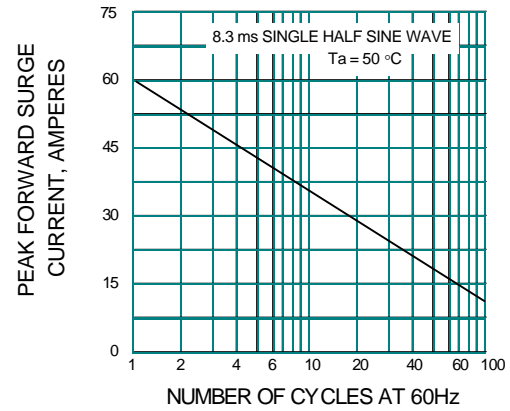


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

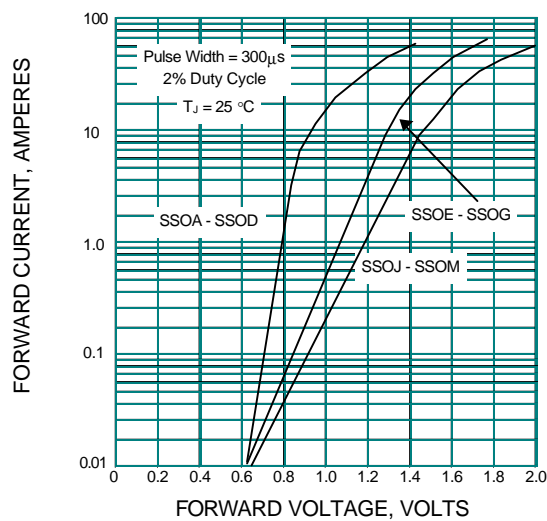


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

