

S2A ~ S2M

PRV : 50 - 1000 Volts

Io : 2.0 Ampere

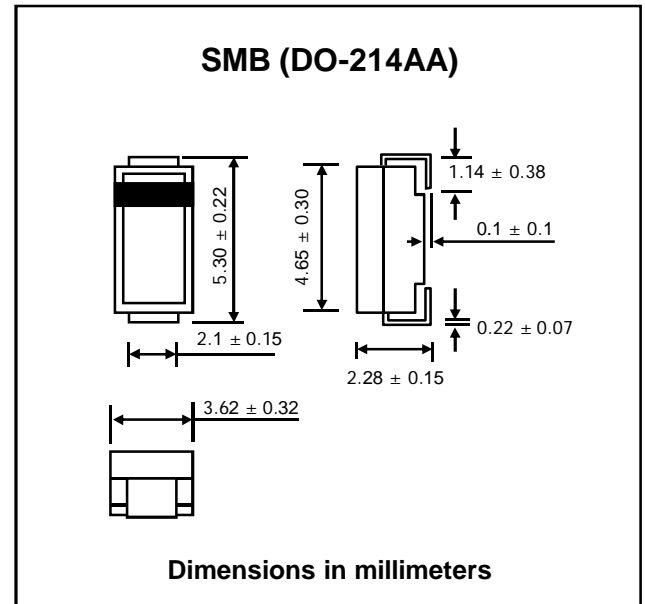
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMB Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Indicated by cathode band
- * Mounting position : Any
- * Weight : 0.093 gram

SURFACE MOUNT 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 | S2A | S2B | S2D | S2G | S2J | S2K | S2M | UNIT |
|--|--------------------|---------------|-----|-----|-----|-----|-----|------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current at T _L = 110 °C | I _{F(AV)} | 2.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) T _L = 100 °C | I _{FSM} | 60 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at I _F = 2.0 A. | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at rated DC Blocking Voltage | I _R | 5.0 | | | | | | | μA |
| | | 200 | | | | | | | μA |
| Typical thermal resistance | R _{θJL} | 16 | | | | | | | °C/W |
| Typical Junction Capacitance (Note 1) | C _J | 30 | | | | | | | pF |
| Junction Temperature Range | T _J | - 55 to + 150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 150 | | | | | | | °C |

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

RATING AND CHARACTERISTIC CURVES (S2A - S2M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

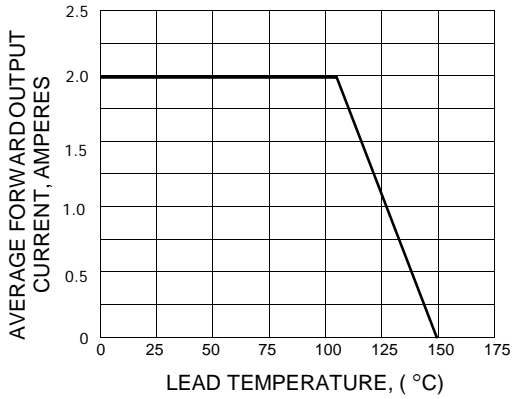


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

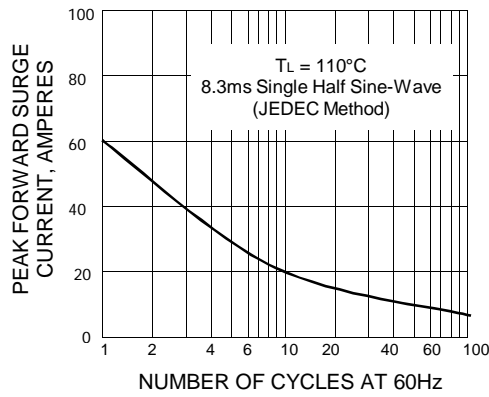


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

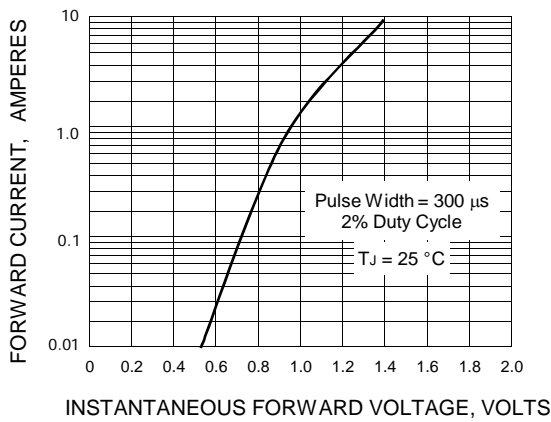


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

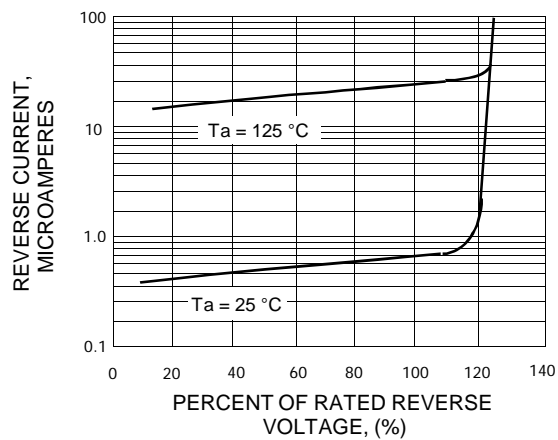


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

