

SN5A - SN5M

PRV : 50 - 1000 Volts
Io : 5.0 Amperes

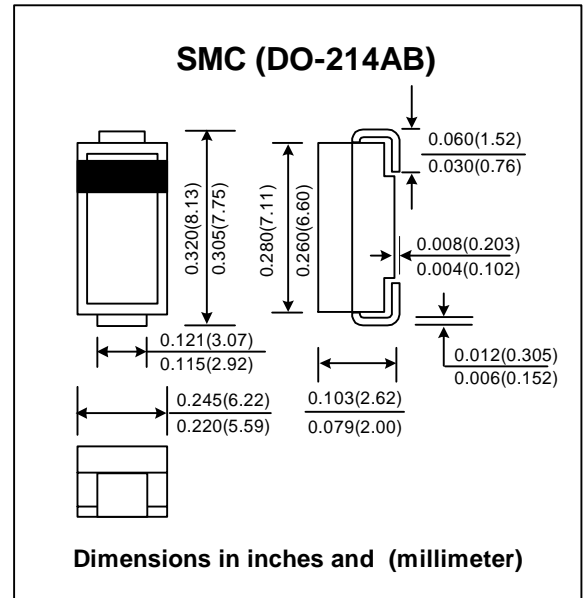
FEATURES :

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

MECHANICAL DATA :

- * Case : SMC Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.21 gram

SURFACE MOUNT RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.
 Single phase, half wave,60 Hz, resistive or inductive loa.
 For capacitive load, derate current b20%.

| RATING | SYMBOL | SN5A | SN5B | SN5D | SN5G | SN5J | SN5K | SN5M | 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 Ta = 60°C | I _F | 5.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 300 | | | | | | | A |
| Maximum Forward Voltage at I _F = 5.0 Amps. | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C | I _R | 20 | | | | | | | μA |
| | I _{R(H)} | 50 | | | | | | | μA |
| Typical Junction Capacitance (Note1) | C _J | 50 | | | | | | | pF |
| Junction Temperature Range | T _J | - 65 to + 175 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 175 | | | | | | | °C |

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage o#.0Vdc

RATING AND CHARACTERISTIC CURVES (SN5A - SN5M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

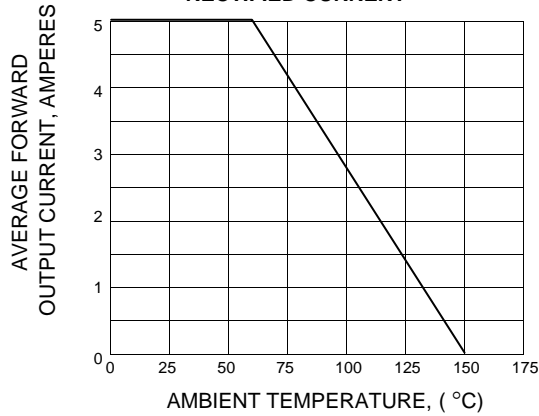


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

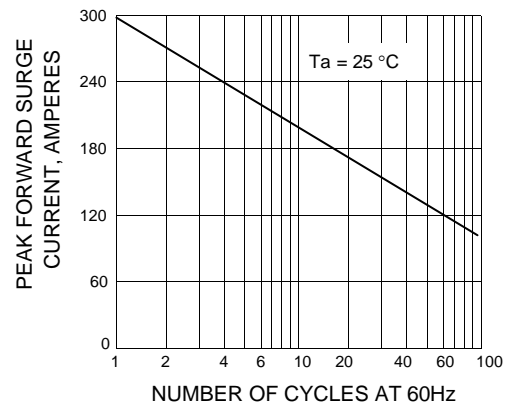


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

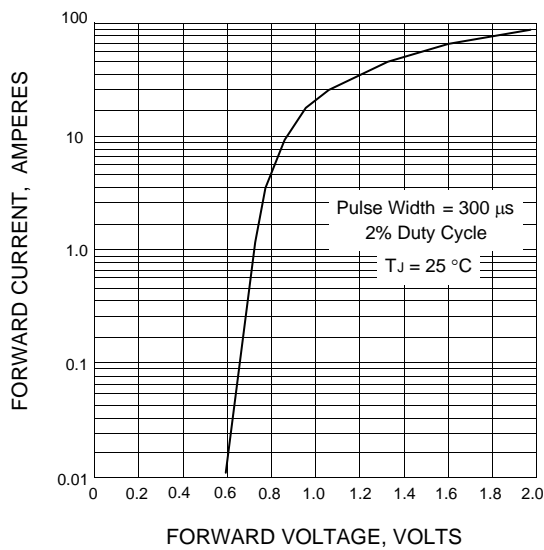


FIG.4 - TYPICAL JUNCTION CAPACITANCE

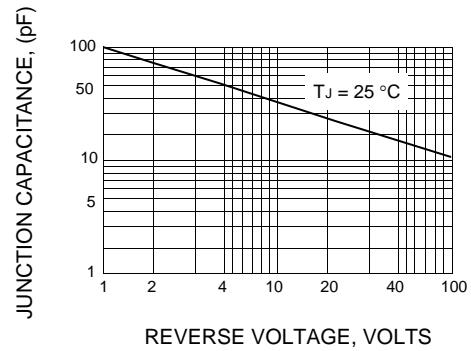


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

