

GN3A - GN3M

PRV : 50 - 1000 Volts
Io : 3.0 Amperes

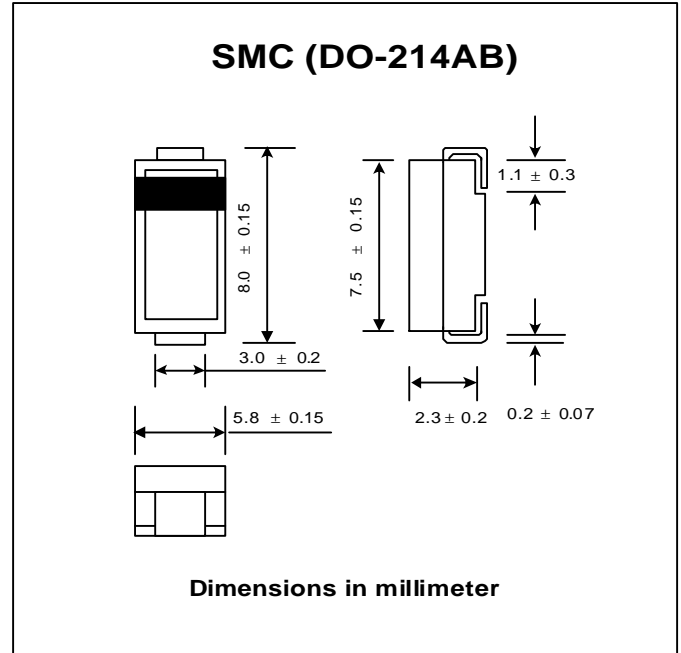
FEATURES :

- * Glass passivated chip
- * High 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

GLASS PASSIVATED JUNCTION SILICON SURFACE MOUNT



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 | GN3A | GN3B | GN3D | GN3G | GN3J | GN3K | GN3M | 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 $T_a = 75\text{ }^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | | | | | | | A |
| Maximum Forward Voltage at $I_F = 3.0$ Amps. | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ | I_R | 5.0 | | | | | | | μA |
| at rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$ | $I_{R(H)}$ | 50 | | | | | | | μA |
| Typical Junction Capacitance (Note1) | C_J | 50 | | | | | | | pF |
| Junction Temperature Range | T_J | - 65 to + 175 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | - 65 to + 175 | | | | | | | $^\circ\text{C}$ |

Note :

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

RATING AND CHARACTERISTIC CURVES (GN3A - GN3M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

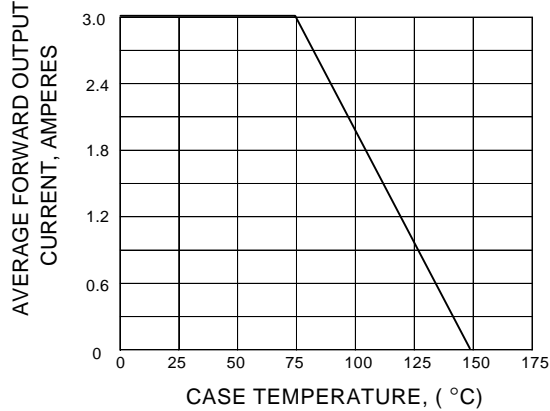


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

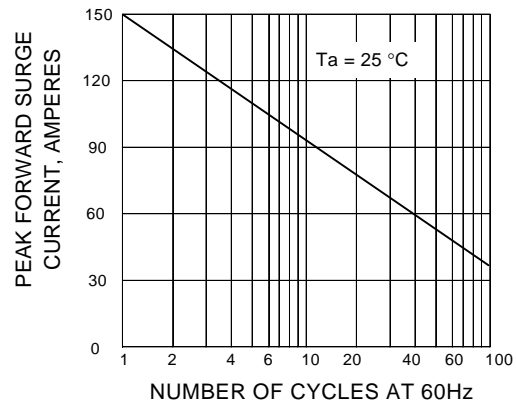


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

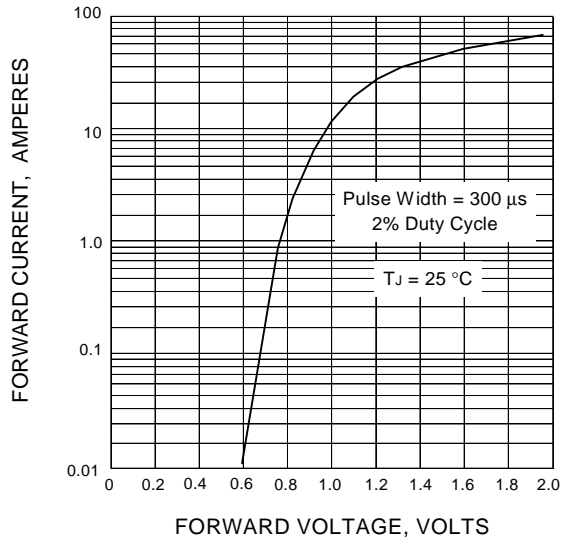


FIG.4 - TYPICAL JUNCTION CAPACITANCE

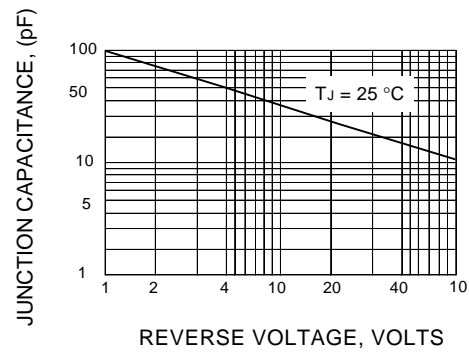


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

