

GN3A THRU GN3M

REVERSE VOLTGE 50V~1000V

FORWARD CURRENT 3.0AMP Surface Mount Rectifiers

FEATURES

- * For surface mount applications
- * Glass passivated chip junction
- * Low profile package

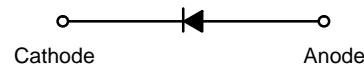
DO- 214AB

SMC



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.25 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	GN3A	GN3B	GN3D	GN3G	GN3J	GN3K	GN3M	UNITS
Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig. 1	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine- wave superimposed on rated load (JEDEC method)	100							A
Maximum Instantaneous Forward Voltage at 3.0A	1.20							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							uA
$T_a=25^{\circ}\text{C}$								
	250							uA
$T_a=125^{\circ}\text{C}$								
Typical reverse Junction recovery time at $I_F = 0.5\text{A}, I_R = 1.0\text{A}$	2.5							uS
Typical Junction Capacitance (Note1)	60							pF
Operating Temperature Range T_J	- 50 ~ +150							°C
Storage Temperature Range T_{stg}	- 50 ~ +150							°C

NOTES

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

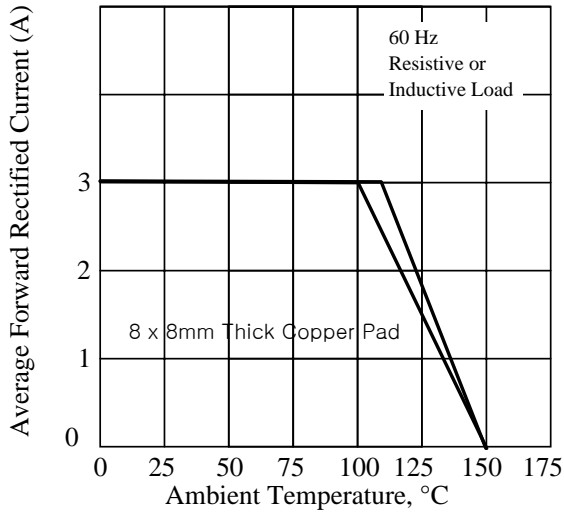


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

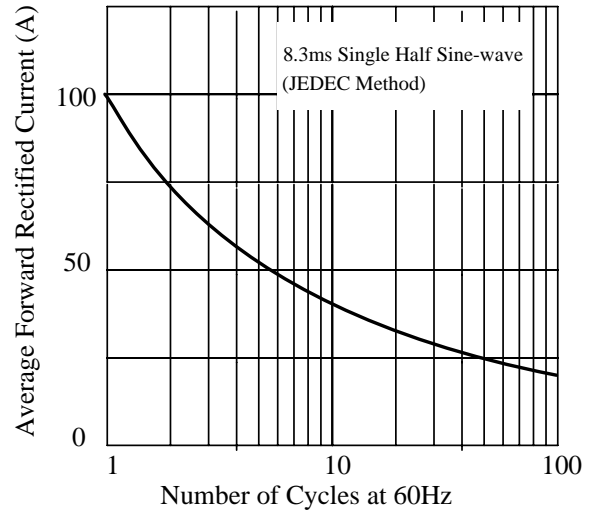


Fig 3. – Typical Instantaneous Forward Characteristics

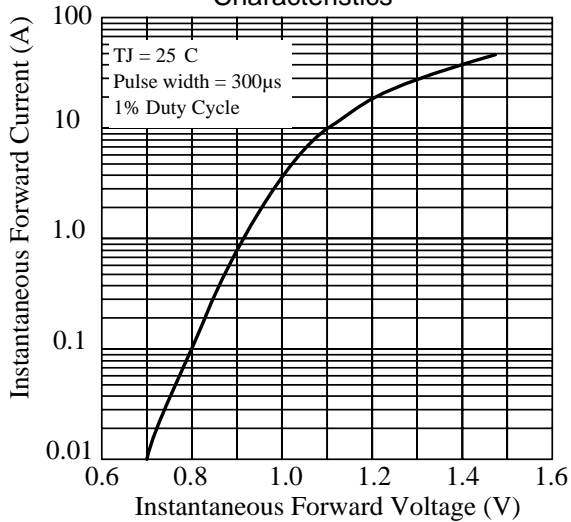


Fig 4. – Typical Reverse Characteristics

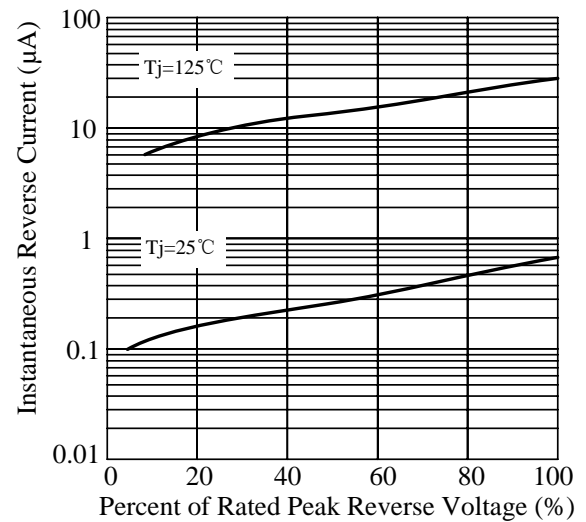


Fig 5. – Typical Junction Capacitance

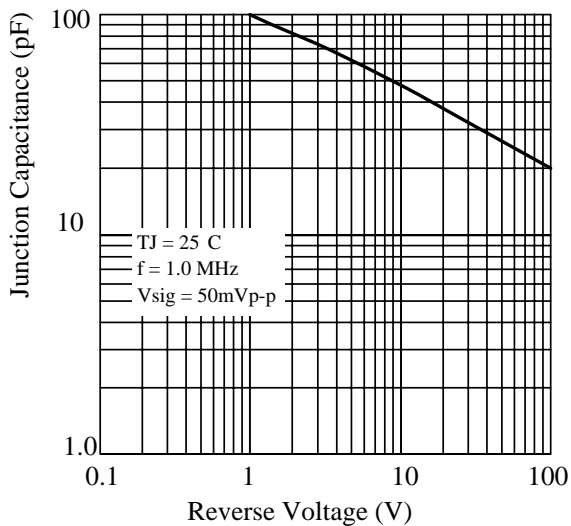
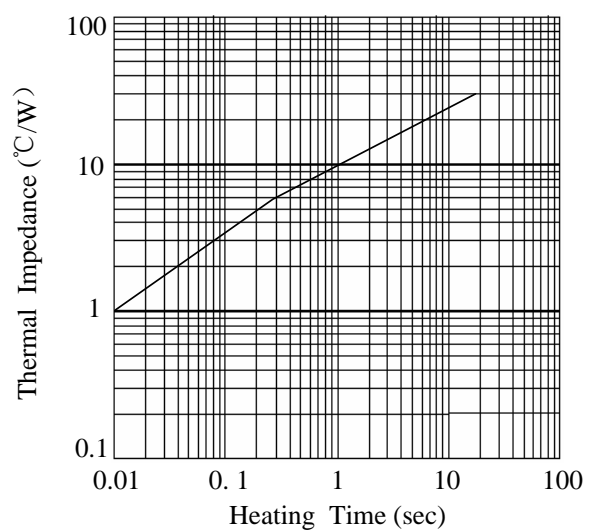


Fig 6. – Transient Thermal Impedance



Package Dimensions in inches and (millimeters)

