

## GN1A THRU GN1M

**REVERSE VOLTGE 50V~1000V**

**FORWARD CURRENT 1.0AMP Surface Mount Rectifiers**

### FEATURES

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

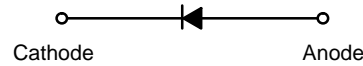
DO- 214AC

SMA



### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V- 0 rate flame retardant
- \* Polarity: Color band denotes cathode end
- \* Weight: 0.118 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	GN1A	GN1B	GN1D	GN1G	GN1J	GN1K	GN1M	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	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine- wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.10							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							uA
$T_a=25^{\circ}\text{C}$								
$T_a=125^{\circ}\text{C}$	50							
Typical reverse Junction recovery time at $I_F = 0.5\text{A}$ , $I_R = 1.0\text{A}$	2.0							uS
Typical Junction Capacitance (Note1)	15							pF
Operating Temperature Range $T_J$	- 55 ~ + 150							°C
Storage Temperature Range $T_{STG}$	- 55 ~ + 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

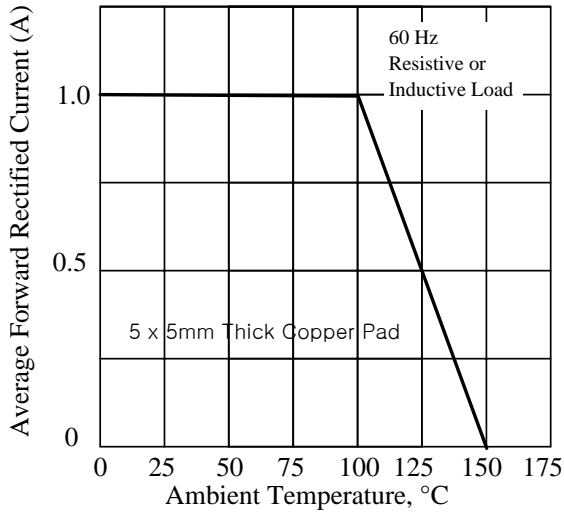


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

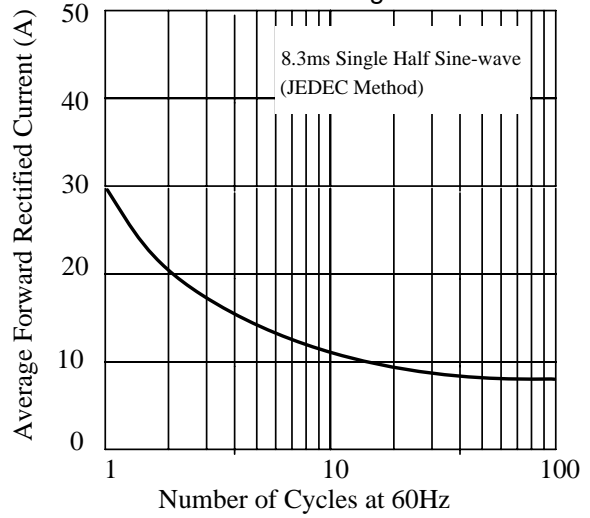


Fig 3. – Typical Instantaneous Forward Characteristics

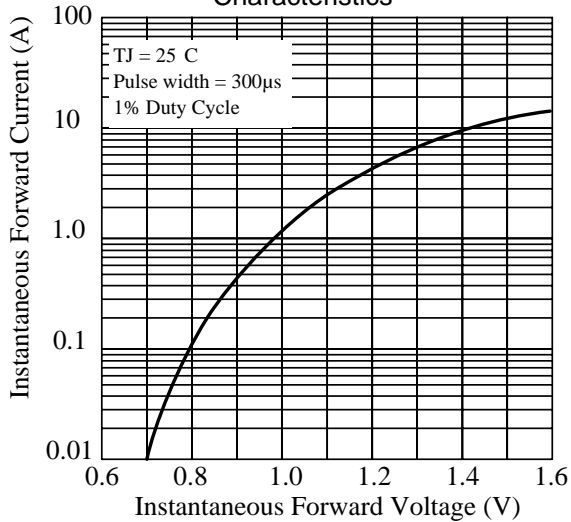


Fig 4. – Typical Reverse Characteristics

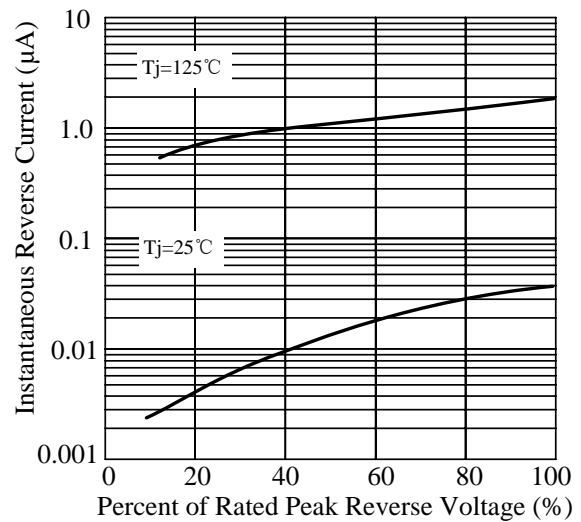


Fig 5. – Typical Junction Capacitance

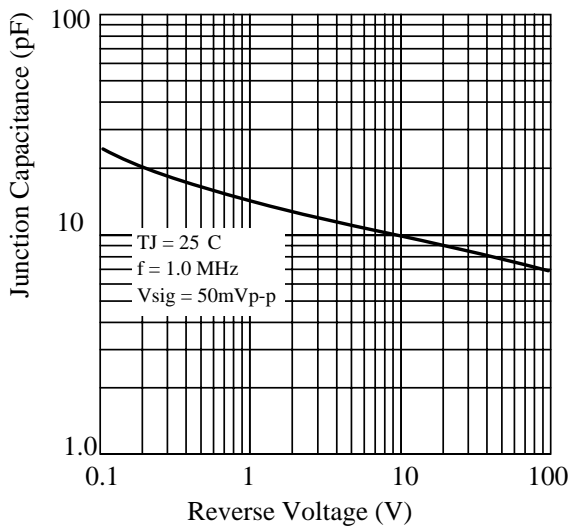
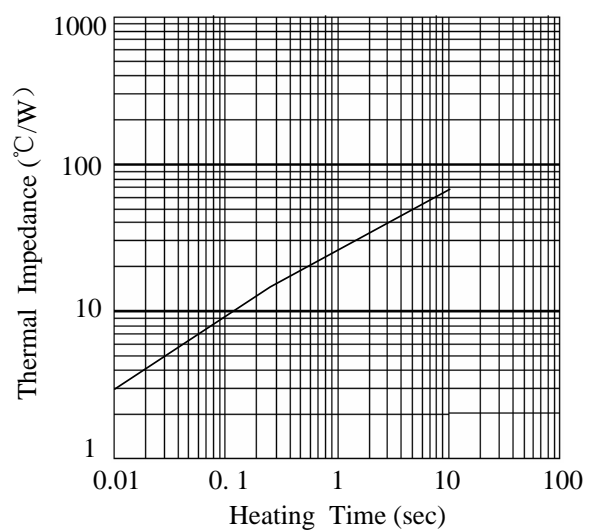


Fig 6. – Transient Thermal Impedance



## Package Dimensions in inches and (millimeters)

