GN1A THRU GN1M SMA

Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 1 A

Pinning

1.Cathode	2.Anode



DO-214AC/SMA

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: DO-214AC/SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.07g / 0.002oz

Marking Code	
GN1A	YFW M1
GN1B	YFW M2
GN1D	YFW M3
GN1G	YFW M4
GN1J	YFW M5
GN1K	YFW M6
GN1M	YFW M7

Maximum Ratings and Electrical characteristics

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

Parameter	Symbols	GN1A	GN1B	GN1D	GN1G	GN1J	GN1K	GN1M	Units
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 Rectified Current at T_c = 125 °C	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	40							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.99							V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	5 50							μA
Typical Junction Capacitance [1]	C_j	6.7							pF
Typical reverse recovery time	trr	1500							nS
Typical Thermal Resistance [2]	$R_{\theta JA}$	90							C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							C

1 **Measured at 1 MHz and applied reverse voltage of 4 V D.C**

2 **P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.**

Fig.3 Ty

0.1
0.6 0.8 0.9 1.0 1.1
