

Features

- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Classification Rating 94V- 0



SMA

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Rating at 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	SYMBOL	NRVA4007T3G-JSM	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Non-Repetitive Peak Forward Surge @ $T_j = 25^\circ\text{C}$ Current 8.3ms Single half sine-wave @ $T_j = 125^\circ\text{C}$ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	30 24	A
Non-Repetitive Peak Forward Surge @ $T_j = 25^\circ\text{C}$ Current 1.0ms Single half sine-wave @ $T_j = 125^\circ\text{C}$ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	60 48	A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	22.5	A
Rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	3.74	$\text{A}^2 \text{s}$
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	1.0	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I_R	5.0	μA
At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$		50	
Typical Junction Capacitance (Note 1)	C_J	12	pF
Typical reverse recovery time (Note 2)	T_{rr}	1.5	ns
Typical Thermal Resistance	R_{θ}	23	$^\circ\text{C/W}$
	$JL R_{\theta JA}$	57	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

Fig. 1 Forward Current Derating Curve

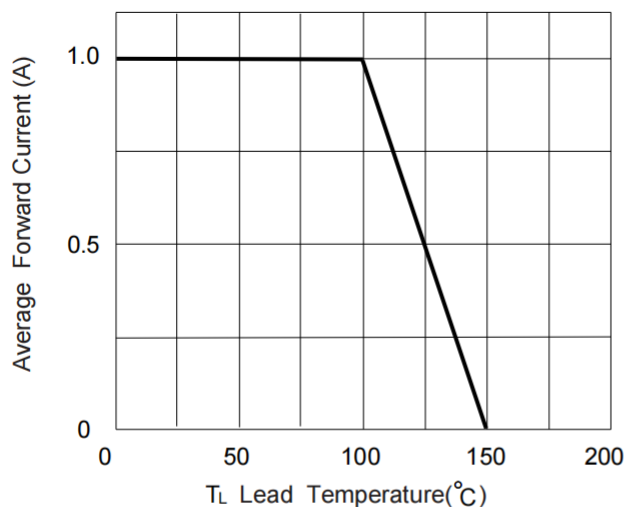


Fig. 2 Typ. Forward Characteristics

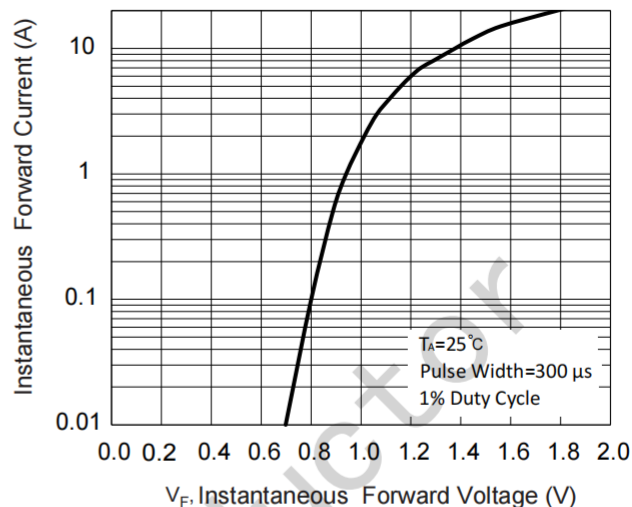


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

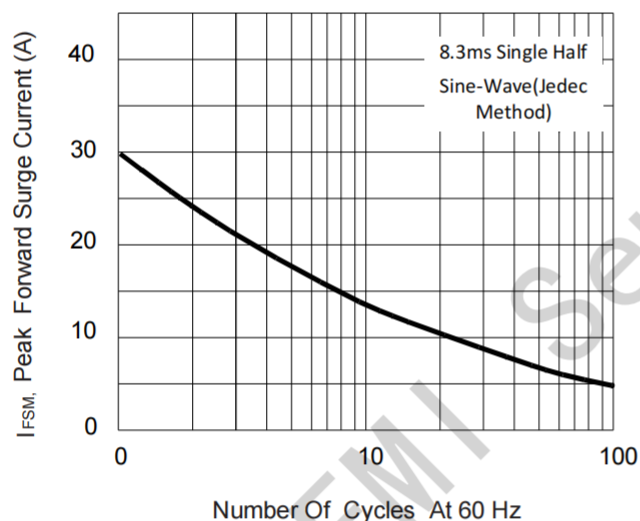


Fig.4 Typical Reverse Characteristics

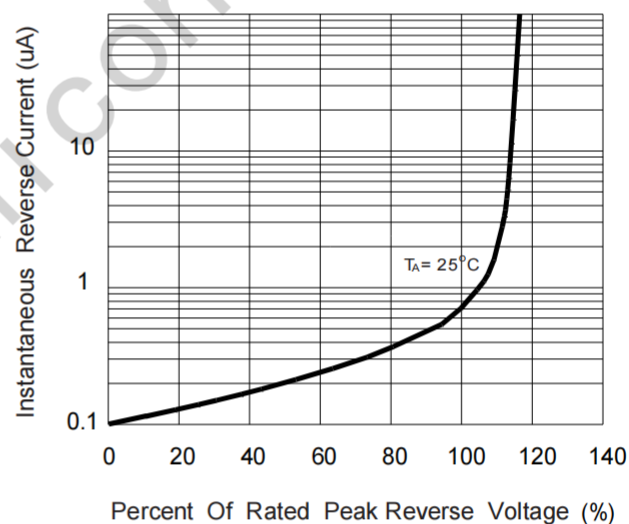


Fig.5 Typical Junction Capacitance

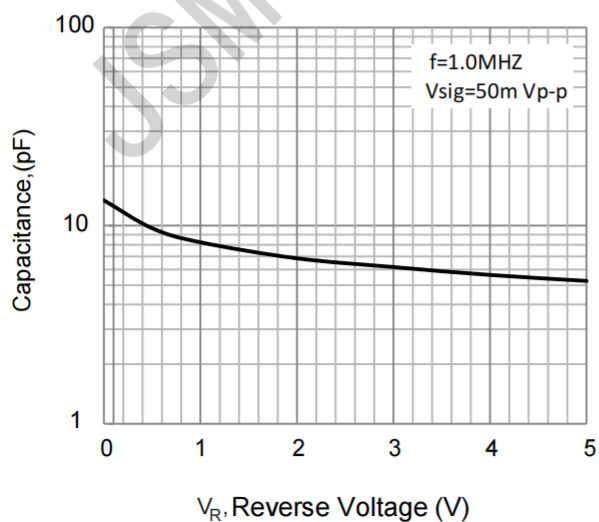
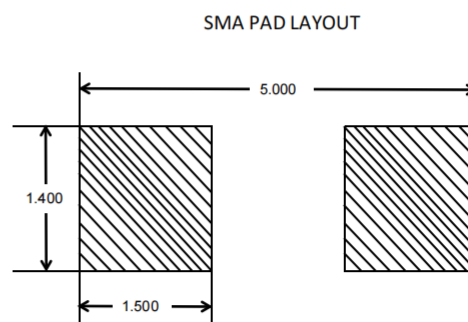


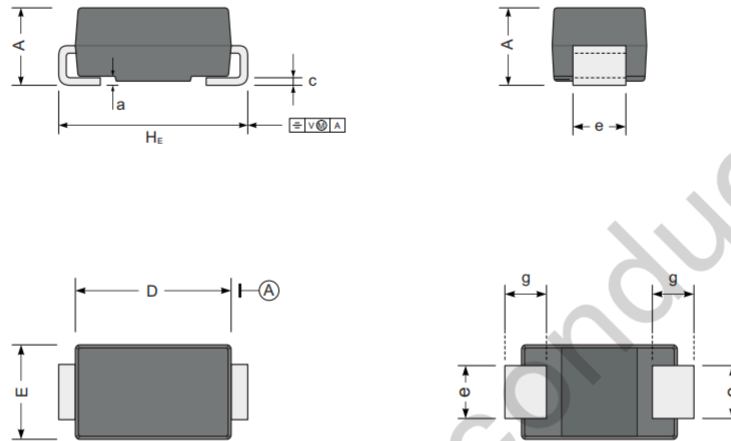
Fig.6 Mounting PAD Layout



Package Information

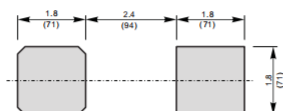
SMA

Plastic surface mounted package; 2 leads



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{(\text{mil})}$