DESCRIPTION

The 1N4001~1N4007 are available in SMA package

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Available in SMA package

ORDERING INFORMATION

Package Type	Part Number
SMA	1N4001
	1N4002
	1N4003
	1N4004
	1N4005
	1N4006
	1N4007
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: SMA

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.055g / 0.002oz

PIN DESCRIPTION

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		Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	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 Rectified Current		$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1A		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C T_A=125°C	I_R	5 50							uA
Typical Junction Capacitance[NOTE1]		C_J	15							pF
Typical Thermal Resistance[NOTE2]		$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 ~+150							°C

NOTE1: Measured at 1MHz and applied reverse voltage of 4V D.C

NOTE2: P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

TYPICAL CHARACTERISTICS

Figure. 1 Forward Current Derating Curve

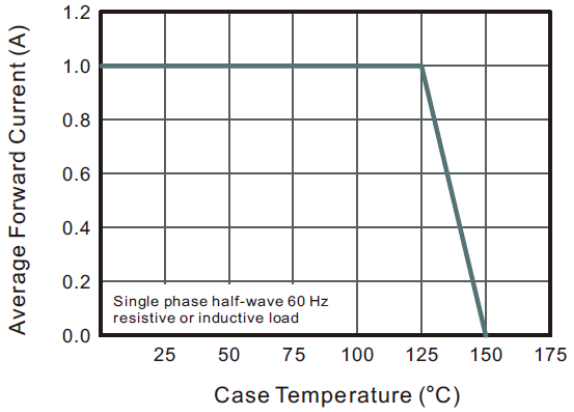


Figure. 2 Typical Instantaneous Reverse Characteristics

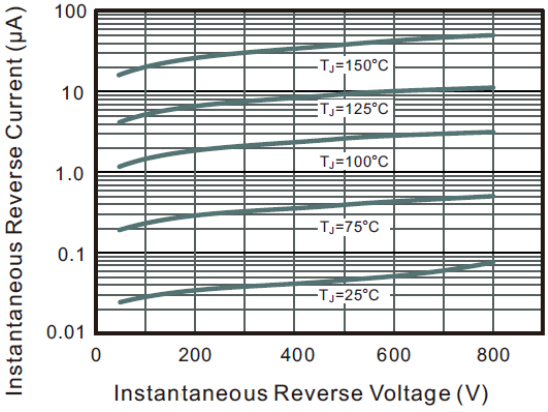


Figure. 3 Typical Forward Characteristic

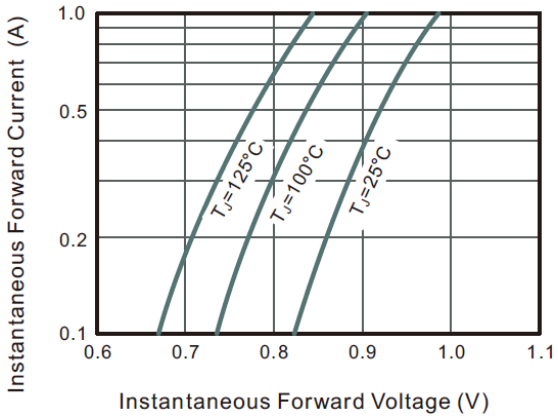


Figure. 4 Typical Junction Capacitance

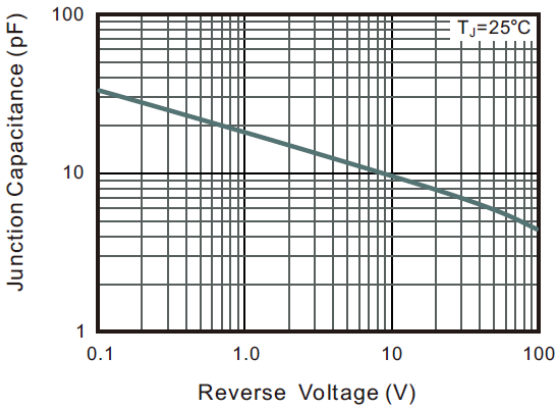
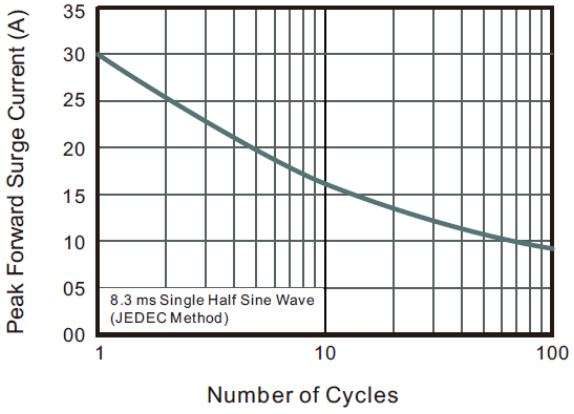


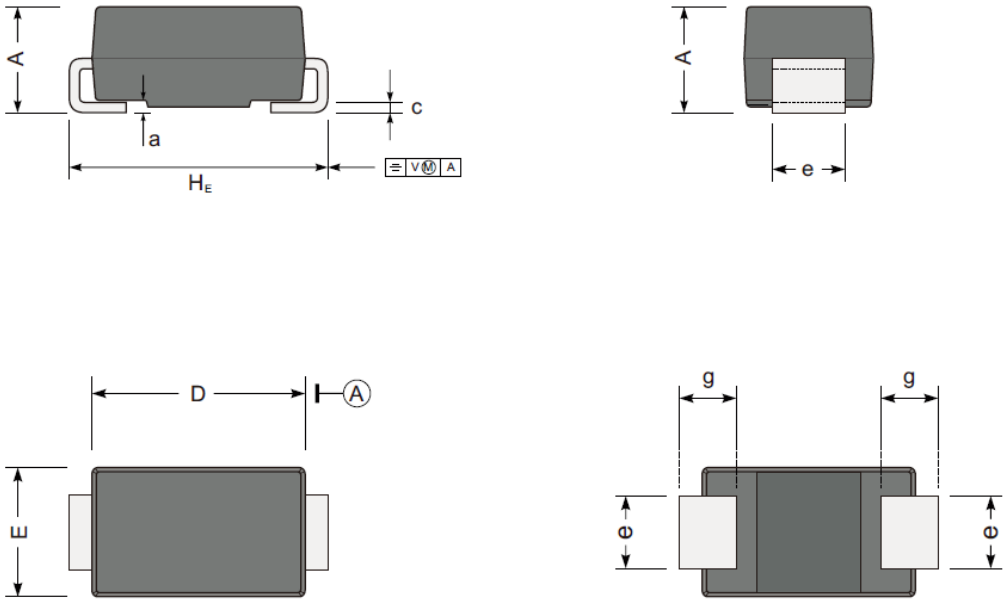
Figure. 5 Maximum Non-Repetitive Peak Forward Surge Current



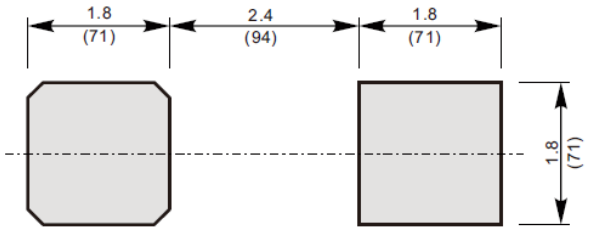
PACKAGE INFORMATION

Dimension in SMA (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Unit : mm (mil)

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	

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