DESCRIPTION

The 1N4001A~1N4007A are available in SMA Package.

FEATURES

- For Surface Mounted Applications
- Low Profile Package
- Glass Passivated Chip Junction
- Available in SMA Package

MECHANICAL DATA

Case: SMA

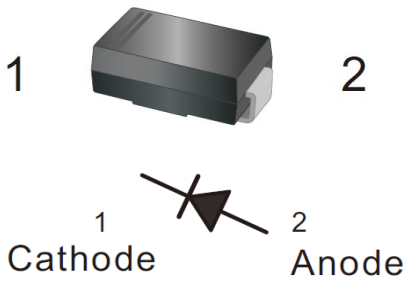
Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.055g / 0.002oz

ORDERING INFORMATION

Package Type	Part Number
SMA	1N4001A
	1N4002A
	1N4003A
	1N4004A
	1N4005A
	1N4006A
	1N4007A
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

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	1N4001A	1N4002A	1N4003A	1N4004A	1N4005A	1N4006A	1N4007A	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	I_R	5							uA
	T_A=125°C		50							
Typical Junction Capacitance (1)		C_J	15							pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 ~+150							°C

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

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

TYPICAL CHARACTERISTICS

Fig 1. Forward Current Derating Curve

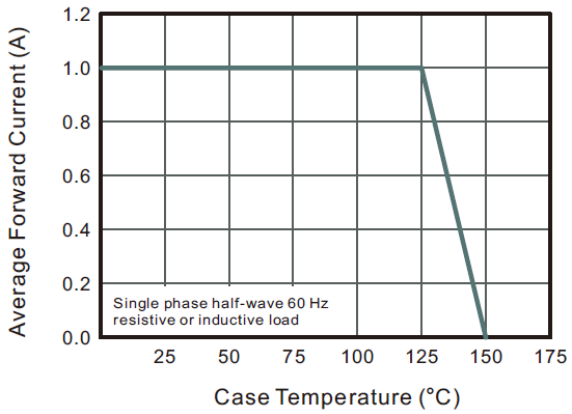


Fig 2. Typical Instantaneous Reverse Characteristics

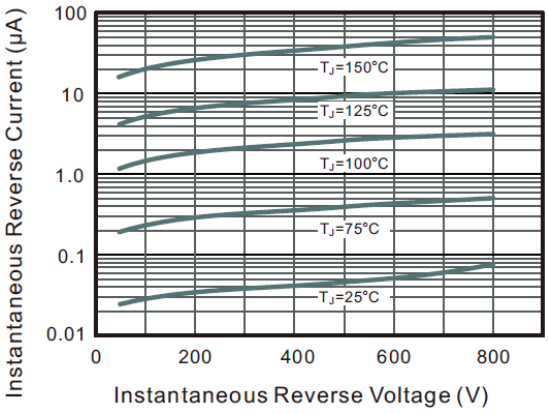


Fig 3. Typical Forward Characteristic

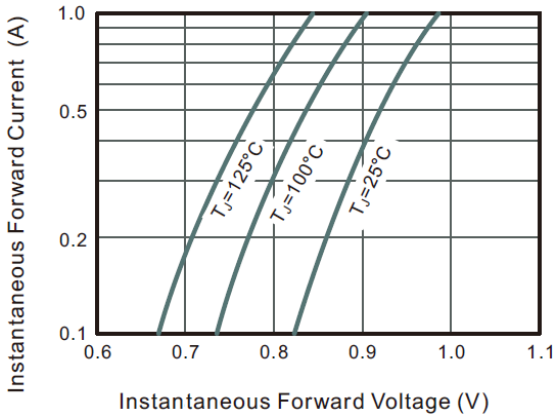


Fig 4. Typical Junction Capacitance

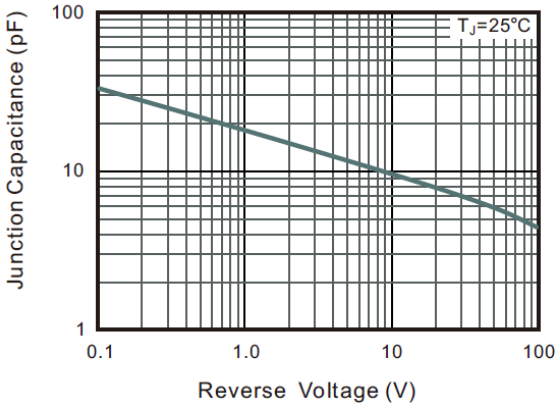
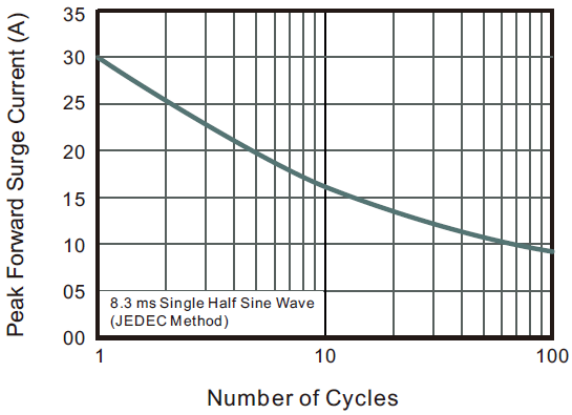


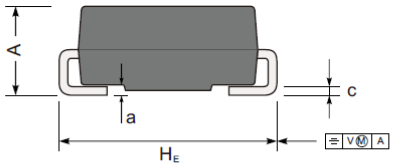
Fig 5. Maximum Non-Repetitive Peak Forward Surge Current

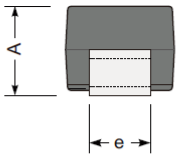


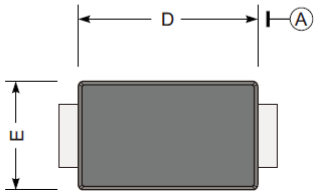
PACKAGE INFORMATION

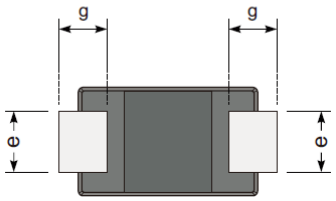
Dimension in SMA (Unit: mm)

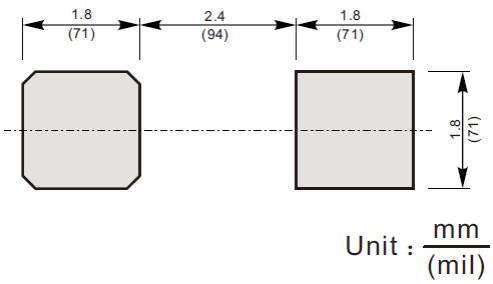
Plastic surface mounted package; 2 leads











The Recommended Mounting Pad Size

DIM	MILLIMETERS	
	MIN	MAX
A	1.900	4.000
a	0.300 TYP.	
c	0.150	0.310
D	4.000	4.500
E	2.300	2.700
e	1.300	1.600
g	0.900	1.500
H_E	4.700	5.200

IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or server property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.