



DESCRIPTION

The 1N4001F~1N4007F are available in SMAF Package

FEATURES

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

ORDERING INFORMATION

Package Type	Part Number
SMAF	1N4001F
	1N4002F
	1N4003F
	1N4004F
	1N4005F
	1N4006F
	1N4007F
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: SMAF

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

Approx. Weight: 27mg 0.00086oz

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	1N4001F	1N4002F	1N4003F	1N4004F	1N4005F	1N4006F	1N4007F	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 at $T_A=65^\circ\text{C}$		$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1A		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	5							uA
	$T_A=125^\circ\text{C}$		50							
Typical Junction Capacitance ^{NOTE1}		C_J	9							pF
Typical Thermal Resistance ^{NOTE2}		$R_{\theta JA}$	115							°C/W
Operating and Storage Temperature Range		$T_J,$ T_{STG}	-55 ~+150							°C

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

NOTE2: Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted



TYPICAL CHARACTERISTICS

Figure. 1 Forward Current Derating Curve

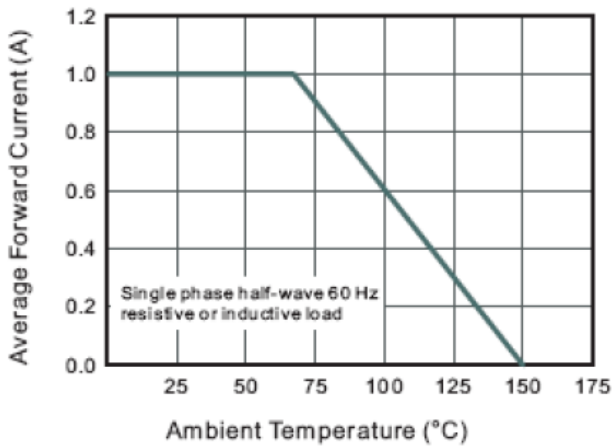


Figure. 2 Typical Instantaneous Reverse Characteristics

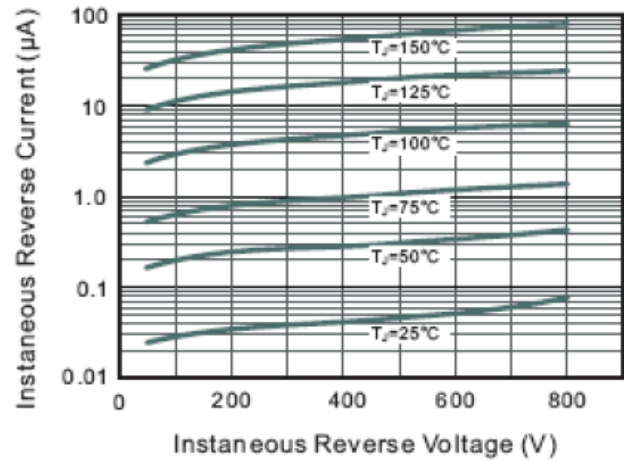


Figure. 3 Typical Forward Characteristic

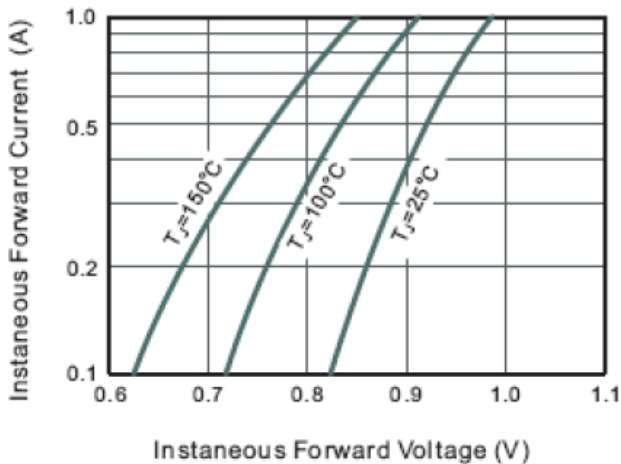
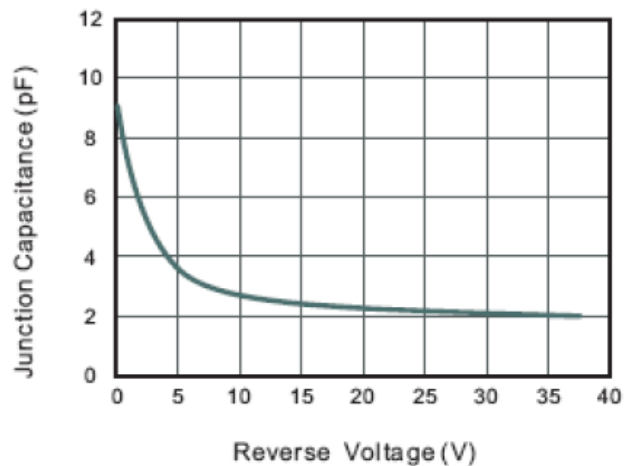


Figure. 4 Typical Junction Capacitance

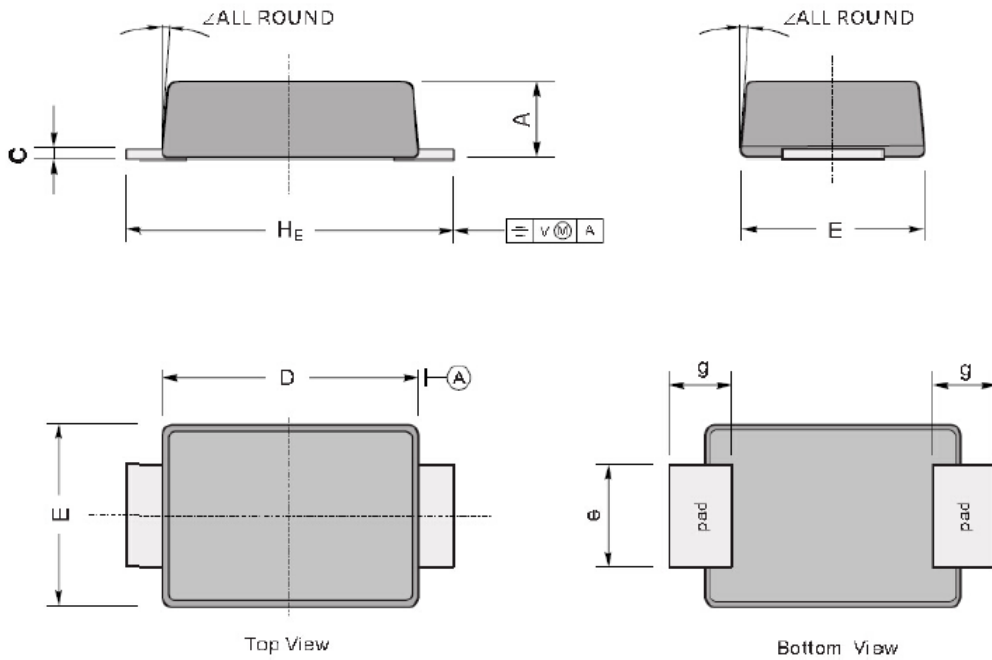




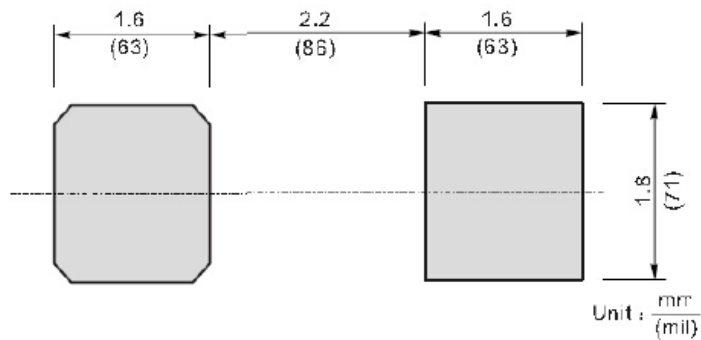
PACKAGE INFORMATION

Dimension in SMAF (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



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

UNIT		A	C	D	E	e	g	H _E	\angle
mm	Max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	Min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	Max	43	7.9	146	106	63	47	193	
	Min	35	4.7	130	94	51	31	173	



IMPORTANT NOTICE

AiT Components (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 Components' 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 servers 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 Components 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.