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°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°C T_A=125°C	I_R	5 50							uA
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

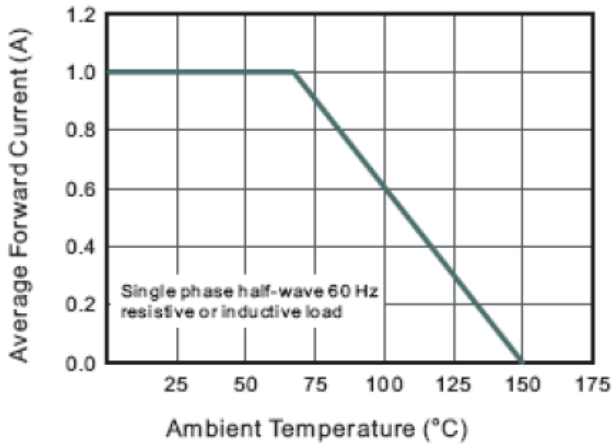


Figure. 2 Typical Instantaneous Reverse Characteristics

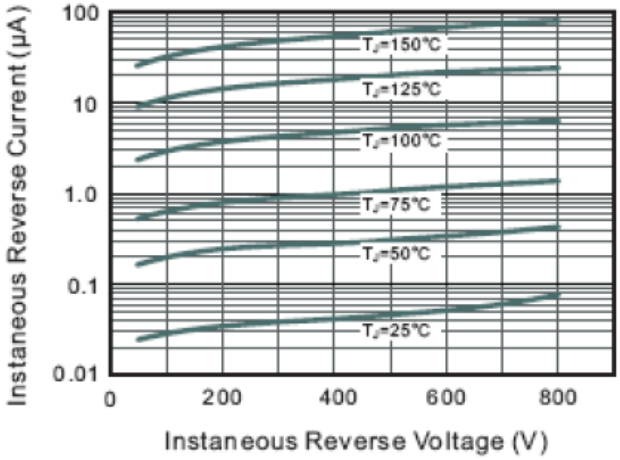


Figure. 3 Typical Forward Characteristic

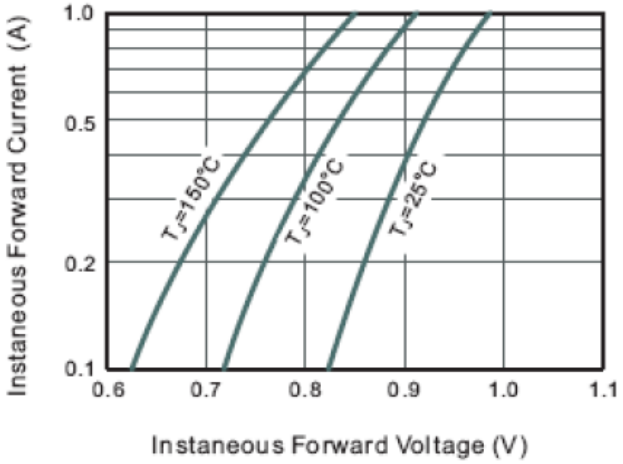
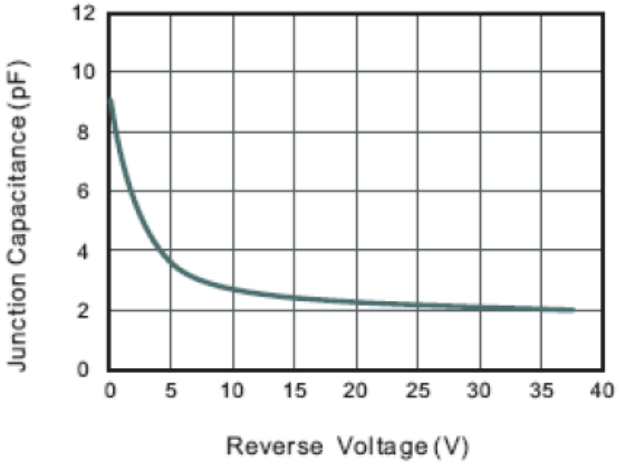


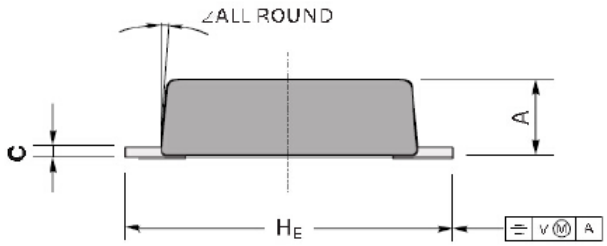
Figure. 4 Typical Junction Capacitance

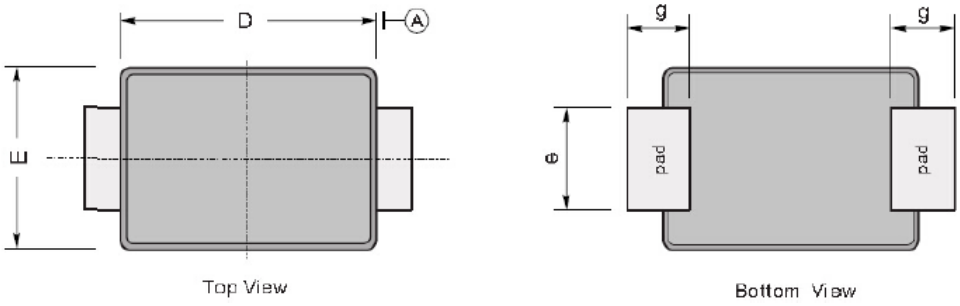


PACKAGE INFORMATION

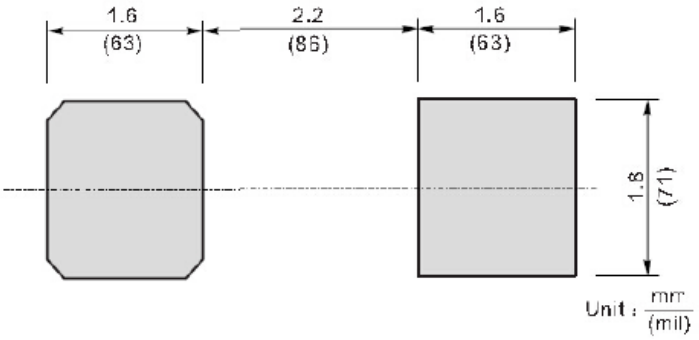
Dimension in SMAF (Unit: mm)

Plastic surface mounted package; 2 leads





The recommended mounting pad size



UNIT		A	C	D	E	e	g	H_E	∠
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	

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