

1N4001W THRU 1N4007W-HAF

Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V

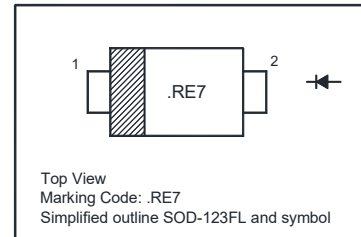
Forward Current - 1 A

Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Ideal for automated placement
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Mechanical Data

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

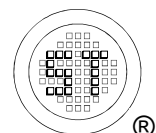
Maximum Ratings and Electrical characteristics

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 %.

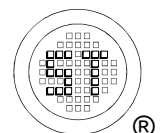
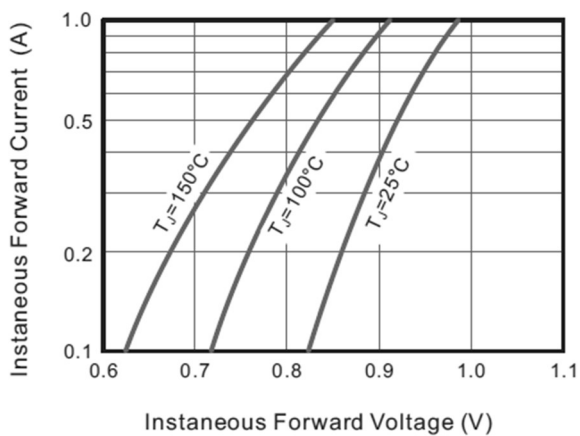
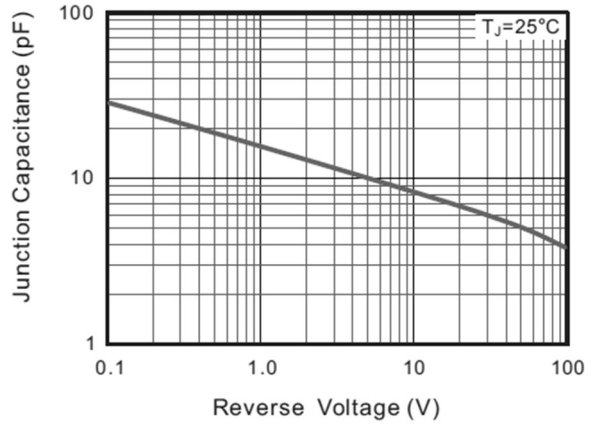
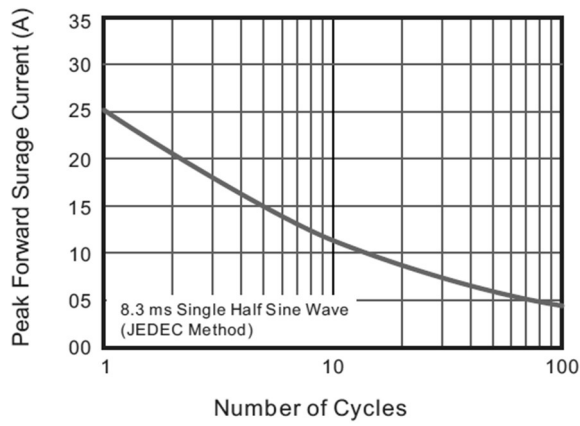
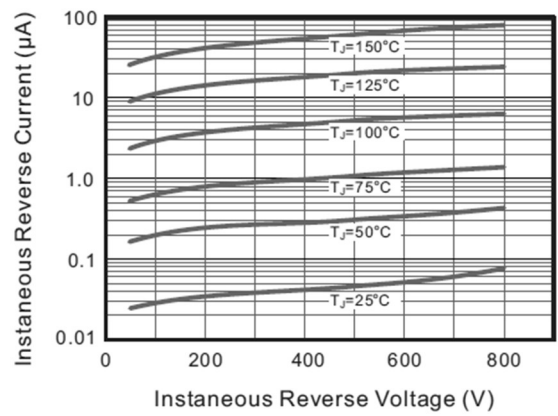
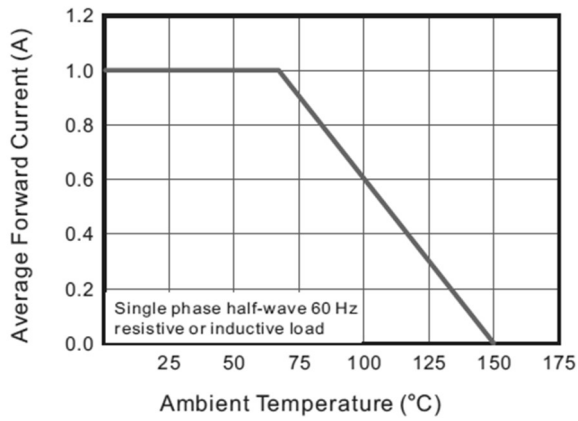
Parameter	Symbols	1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_a = 65^\circ\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	5 50							μA
Typical Junction Capacitance ¹⁾	C_j	8							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	90							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150							$^\circ\text{C}$

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

²⁾ P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



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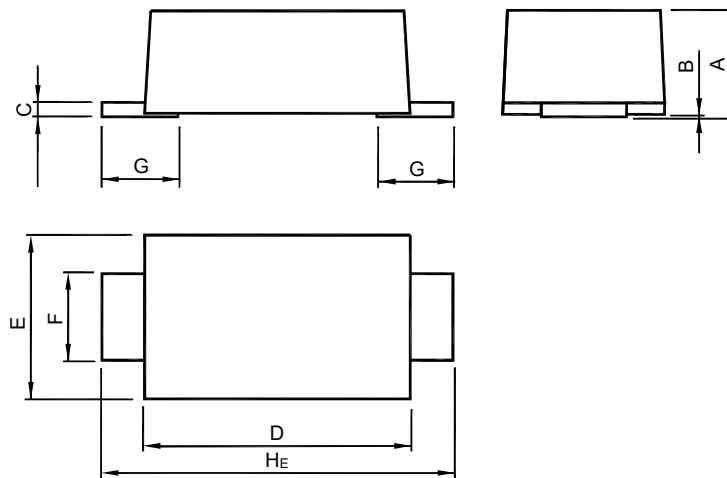


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PACKAGE OUTLINE

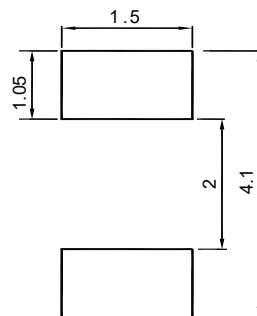
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08 0.88	0.1 0	0.2 0.1	2.9 2.7	1.9 1.7	1.1 0.8	0.85 0.45	3.9 3.5

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line

" • " = HAF (Halogen and Antimony Free)

" RE7 " = Part No.

Font type: Arial

