EVVOSEMI®

THINK CHANGE DO

ESD TVS MOS LDO Diode Sensor DC-DC

Product Specification

Domestic Part Number	1N4001(M1) - 1N4007(M7)
Overseas Part Number	1N4001(M1) - 1N4007(M7)
Equivalent Part Number	1N4001(M1) - 1N4007(M7)

SURFACE MOUNT GENERAL RECTIFIER
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

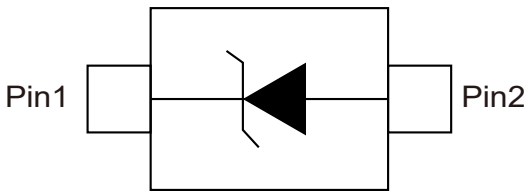
1.Features

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

2.Mechanical Data

- Case: JEDEC DO-214AC molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight:0.003 ounce, 0.093 grams

3.Pinning information



SMA

4.Maximum Ratings And Electrical Characteristics

Parameter		Symbols	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	Units
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T_L=110°C		$I_{(AV)}$	1							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30							Amps
Maximum instantaneous forward voltage at 1.0A		V_F	1							Volts
Maximum DC reverse current at rated DC blocking voltage	T_A=25°C	I_R	5							uA
	T_A=100°C		50							
Typical junction capacitance (NOTE 1)		C_J	15							pF
Typical thermal resistance (NOTE 2)		R_{qJA}	75							°C/W
Junction and storage temperature range		T_J,T_{STG}	-55 to 150							°C

Ratings at 25°C ambient temperature unless otherwise specified.Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Notes:

1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas.

5.Typical characteristic

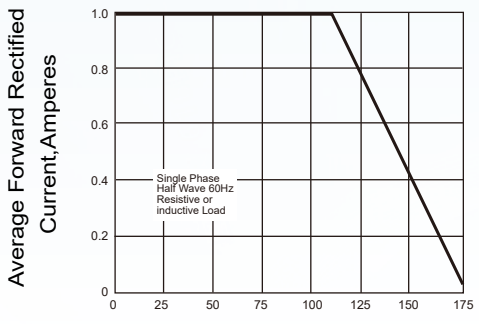


Figure 1: Forward Current Derating Curve

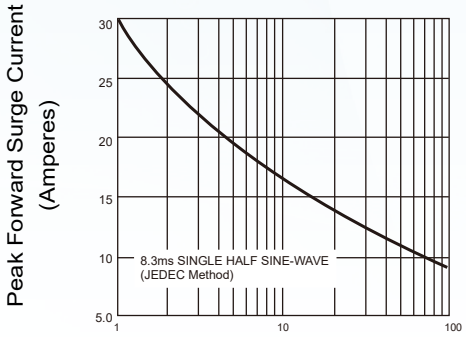


Figure 2: Maximum Non-repetitive Peak Forward Surge Current

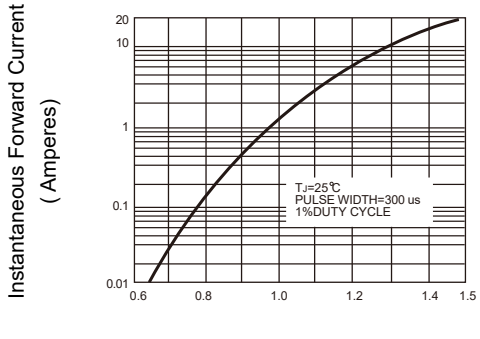


Figure 3: Typical Instantaneous Forward Characteristics

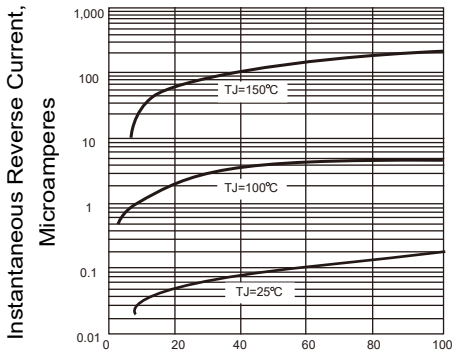


Figure 4: Typical Reverse Characteristics

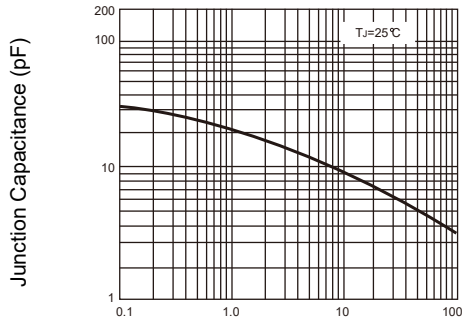


Figure 5: Typical Junction Capacitance

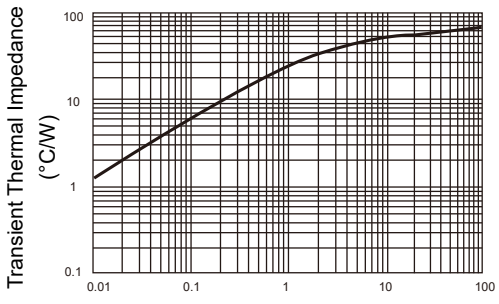
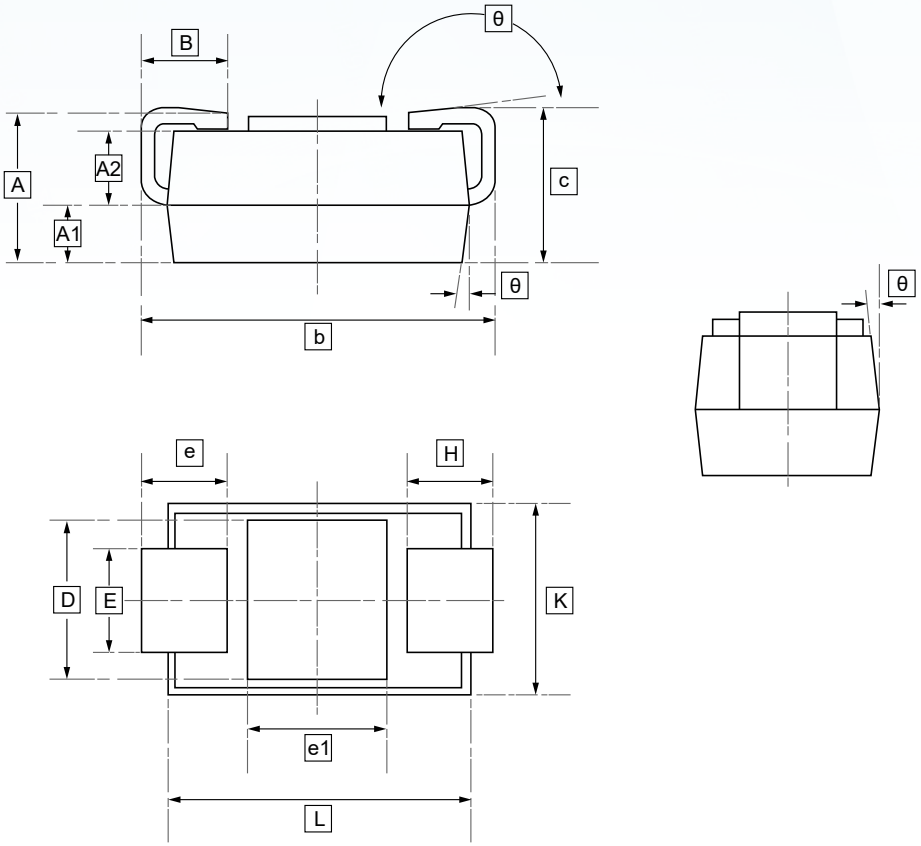


Figure 6: Typical Transient Thermal Impedance

9.SMA Package Outline Dimensions

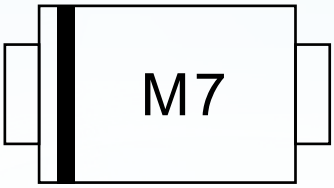


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	B	b	c	D	E	e1	L	K	θ
Min	1.95	0.77	0.97	1.10	4.95	2.00	2.09	1.38	1.95	4.25	2.60	0°
Max	2.05	0.83	1.03	1.30	5.15	2.20	2.19	1.42	2.05	4.35	2.65	5°

Notes: e-H<0.15mm

7 .Ordering information



Order Code	Package	Base QTY	Delivery Mode
1N4007(M7)	SMA	2000	Tape and reel

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