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SEMICONDUCTOR



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PLED

1N4001 THRU 1N4007

Product specification


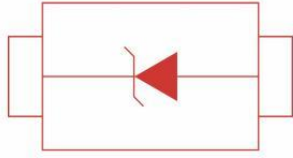
FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- High surge current capability

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.063 gram

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	PINNING	
		PIN	DESCRIPTION
		1	Cathode
		2	A node

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1N4001 M1	1N4002 M2	1N4003 M3	1N4004 M4	1N4005 M5	1N4006 M6	1N4007 M7	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Ta=25°C	5.0							µA
Ta=100°C	50							µA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance R JA (Note 2)	50							°C/W
Operating and Storage Temperature Range Tj , Tstg	-65—+150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (1N4001 THRU 1N4007)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

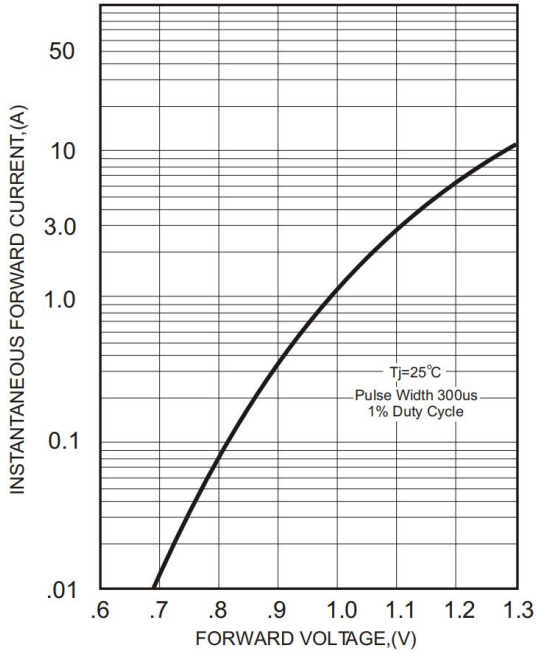


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

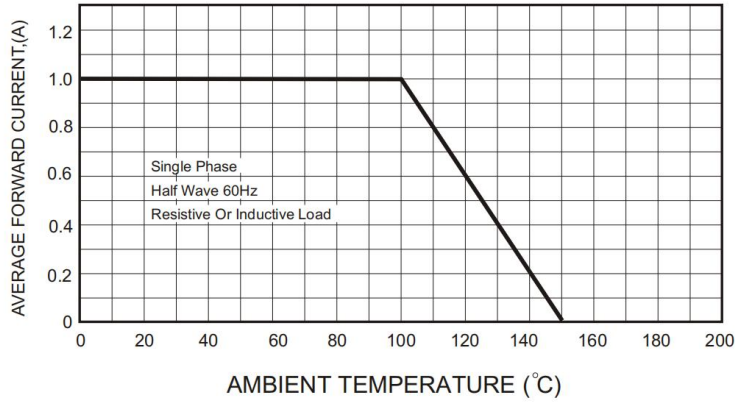


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

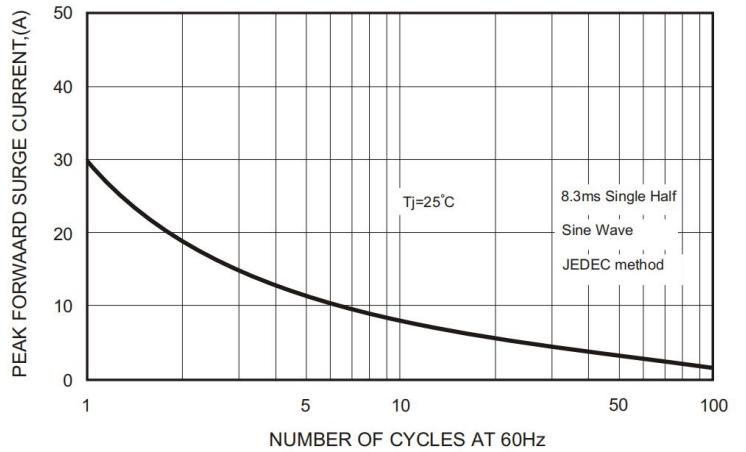


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

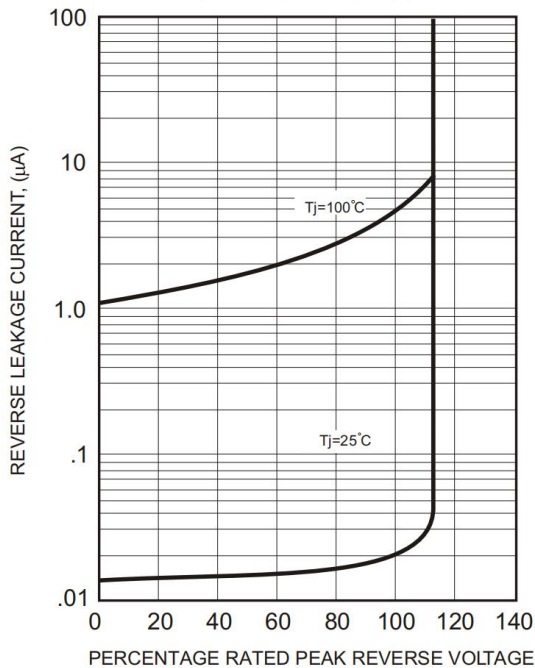
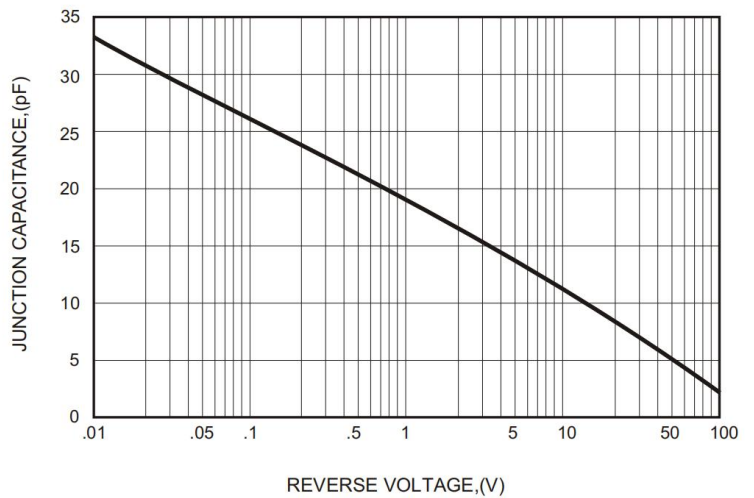
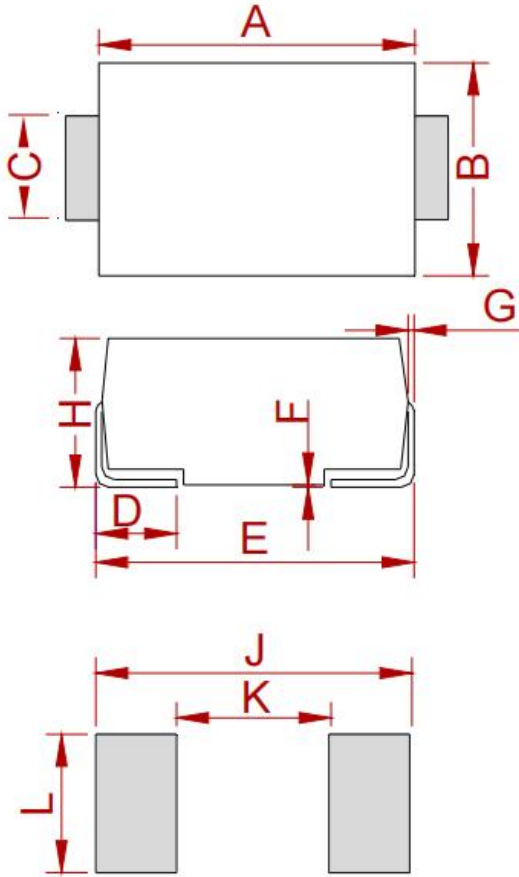


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

SMA

REEL SPECIFICATION

P/N	PKG	QTY
1N4001 THRU 1N4007	SMA	2000

M1	M2	M3	M4	M5	M6	M7
1N4001 MARKING: M1	1N4002 MARKING: M2	1N4003 MARKING: M3	1N4004 MARKING: M4	1N4005 MARKING: M5	1N4006 MARKING: M6	1N4007 MARKING: M7

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