1N4001 THRU 1N4007

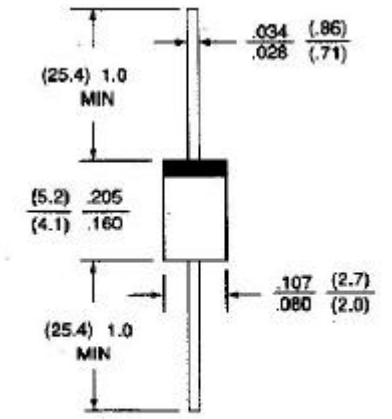
PLASTIC SILICON RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 1.0 Ampere

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Exceeds environmental standards of MIL-S-19500/228

DO-41



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic , DO-41

Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	75	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 T_A=75	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Forward Voltage at 1.0A DC and 25	1.1							V
Maximum Full Load Reverse Current Full Cycle Average at 75 Ambient	30							A
Maximum Reverse Current at T_A=25 At Rated DC Blocking Voltage T_A=100	5.0 500							A A
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance (Note 2) R JA	50							/W
Typical Thermal resistance (NOTE 2) R JL	25							/W
Operating and Storage Temperature Range T_J,T_{STG}	-55 to +150							

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance Junction to Ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.B mounted.

RATING AND CHARACTERISTIC CURVES

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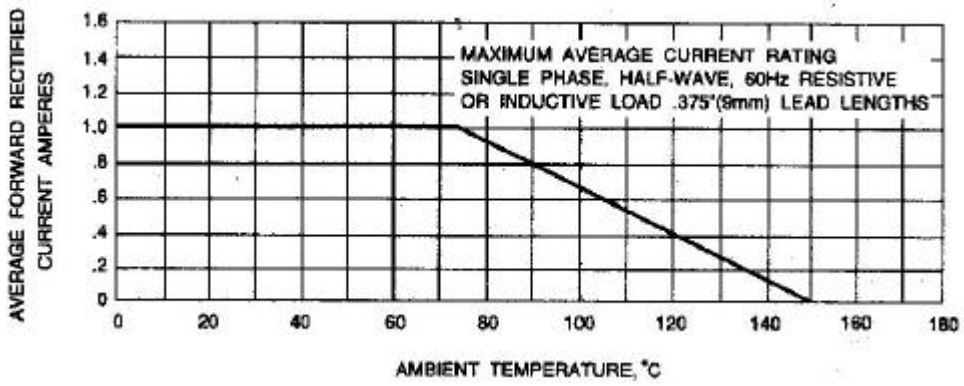

Fig. 1-TYPICAL FORWARD CURRENT DERATING CURVE

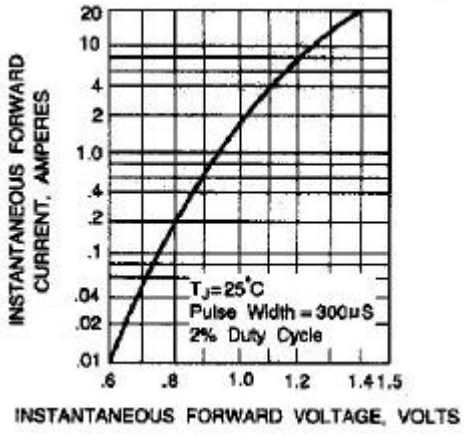

Fig. 2-TYPICAL FORWARD CHARACTERISTICS

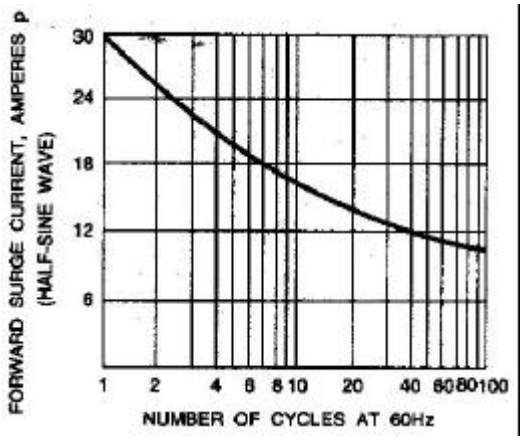

Fig. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

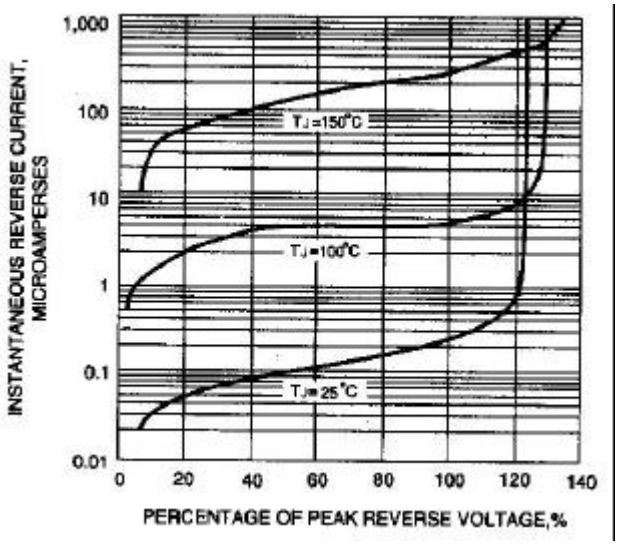

Fig. 4-TYPICAL REVERSE CHARACTERISTICS

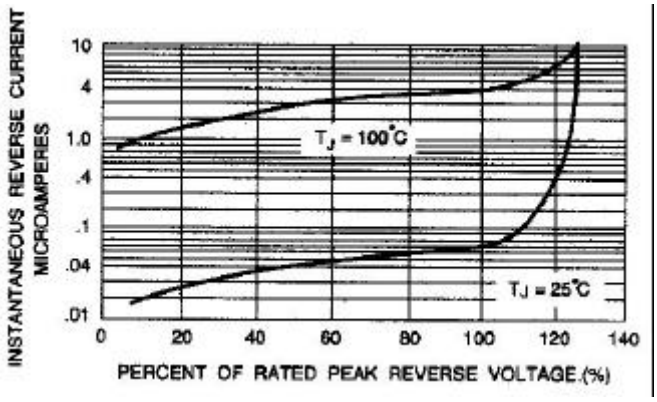

Fig. 5-TYPICAL REVERSE CHARACTERISTICS