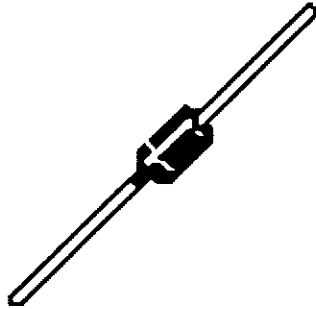




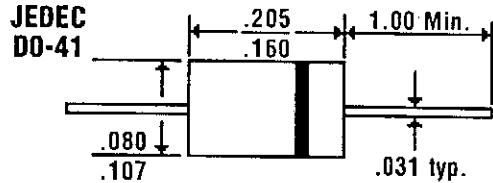
1.0 Amp MINIATURE PLASTIC SILICON RECTIFIERS

1N4001 ... 4007 Series

Description



Mechanical Dimensions



Features

- LOW COST
- LOW LEAKAGE
- DIFFUSED JUNCTION
- MEETS UL SPECIFICATION 94V-0

Ratings at 25 °C 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 °C	1.0							A
Peak Forward Surge Current 0.2ms single half sine-wave superimposed on rated load (JEDEC method)	80							A
Maximum Forward Voltage at 1.0A DC and 25 °C	1.1							V
Maximum Full Load Reverse Current Full Cycle Average at 75 °C Ambient	30							μ A
Maximum Reverse Current at T _A =25 °C	5.0							μ A
At Rated DC Blocking Voltage T _A =100 °C	500							μ A
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance (Note 2) R θ JA	50							°C/W
Typical Thermal resistance (NOTE 2) R θ JL	25							°C/W
Operating and Storage Temperature Range T _J , T _{STG}	-55 to +150							°C

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.

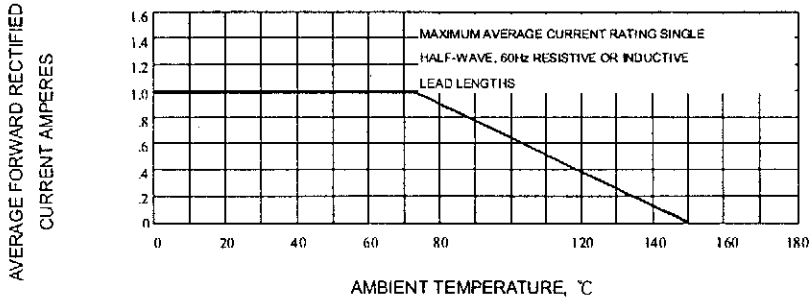
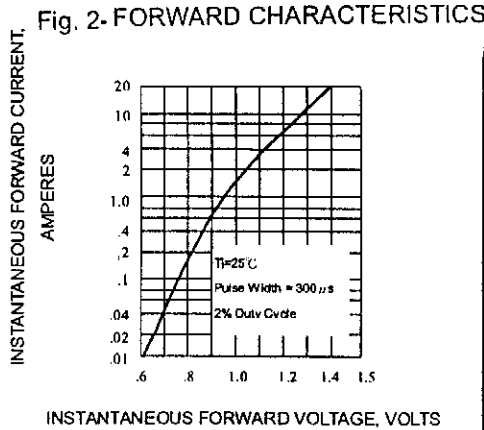
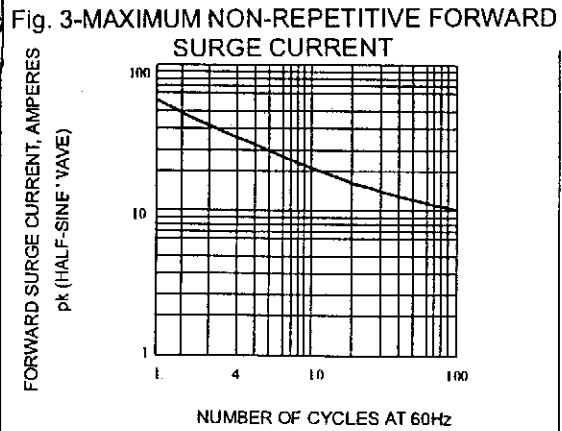


Fig. 1-TYPICAL FORWARD CURRENT DERATING CURVE

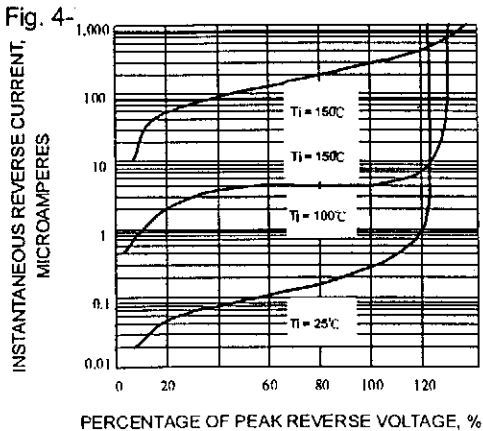


INSTANTANEOUS FORWARD VOLTAGE, VOLTS

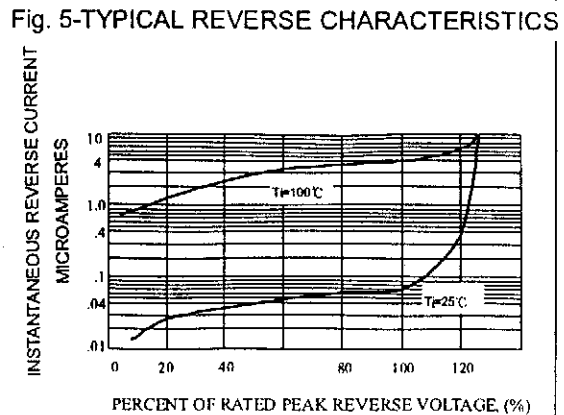


FORWARD SURGE CURRENT, AMPERES
pk (HALF-SINE WAVE)

NUMBER OF CYCLES AT 60Hz



PERCENTAGE OF PEAK REVERSE VOLTAGE, %



INSTANTANEOUS REVERSE CURRENT
MICROAMPERES

PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 Hz Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
 2. Thermal Resistance Junction to Ambient, Jedec Method.
 3. .375", (9.5mm) lead lengths.