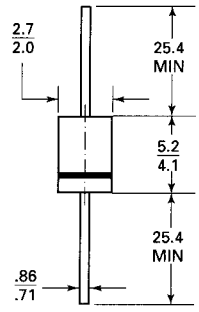
1N4001...1N4007
PLASTIC SILICON RECTIFIERS

FEATURES

* Low forward voltage
* High current capability
* Low leakage current
* High surge capability
* Low cost

DO-41



VOLTAGE RANCE
50 to 1000 Volts
CURRENT
1.0 Amperes

Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Single-phase, half-wave, 60 Hz, resistive or inductive load

	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	70	140	280	420	560	700	V
Maximum DC Blocking Voltage*	50	100	200	400	600	800	1000	V
Maximum Average Forward* Rectified Current 3/8 Lead Length at T_A = 75 °C	1.0							A
Maximum Overload Surge 8.3 ms single half sine-wave	50							A
Maximum Forward Voltage at 1.0A AC and 25 °C	1.0							V
Maximum Full Load Reverse Current, Full Cycle Average at 75 °C Ambient*	30							µA
Maximum DC Reverse Current at 25 °C at Rated DC Blocking Voltage at 75 °C	5.0 50.0							µA µA
Typical Junction Capacitance (Note 1)	30							pF
Operating and Storage Temperature Range	-65 to + 175							°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}.

* JEDEC Registered Value.

Fig. 1 – TYPICAL FORWARD CHARACTERISTICS

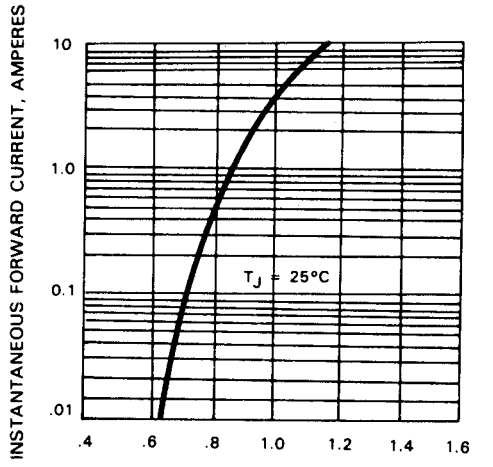


Fig. 2–PEAK FORWARD SURGE CURRENT

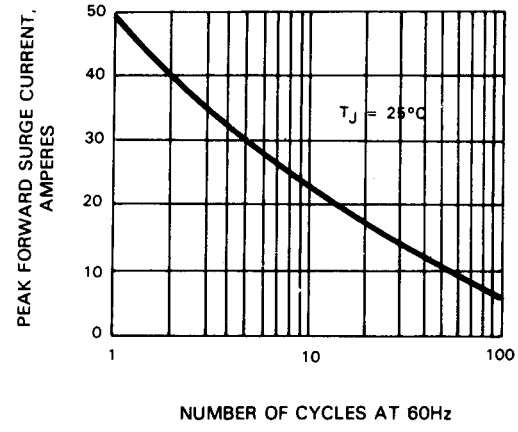


Fig. 3–FORWARD CURRENT DERATING CURVE

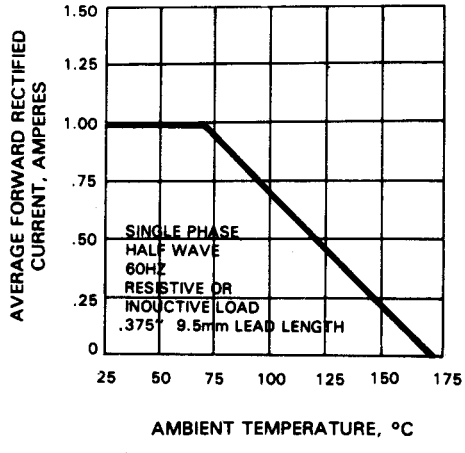


Fig. 4–TYPICAL JUNCTION CAPACITANCE