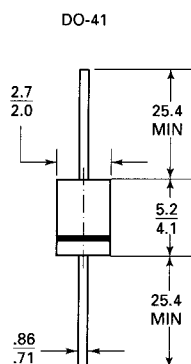


1N4001...1N4007

PLASTIC SILICON RECTIFIERS

FEATURES

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



VOLTAGE RANCE

50 to 1000 Volts

CURRENT

1.0 Amperes

Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

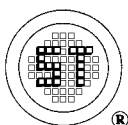
Single-phase, half-wave, 60 Hz, resistive or inductive load

	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 $T_A = 75^\circ\text{C}$	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							$^\circ\text{C}$

NOTES:

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

* JEDEC Registered Value.



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PLASTIC SILICON RECTIFIERS

Fig. 1 — TYPICAL FORWARD CHARACTERISTICS

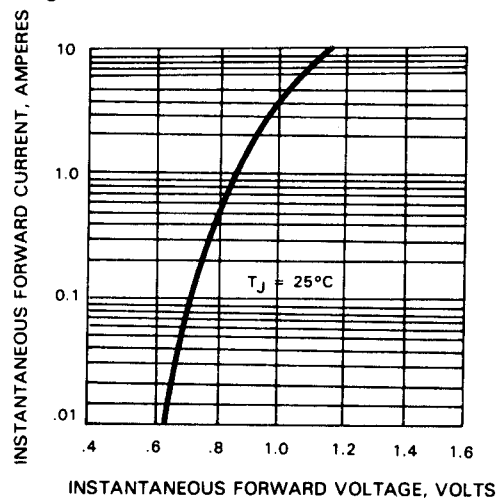


Fig. 2 — PEAK FORWARD SURGE CURRENT

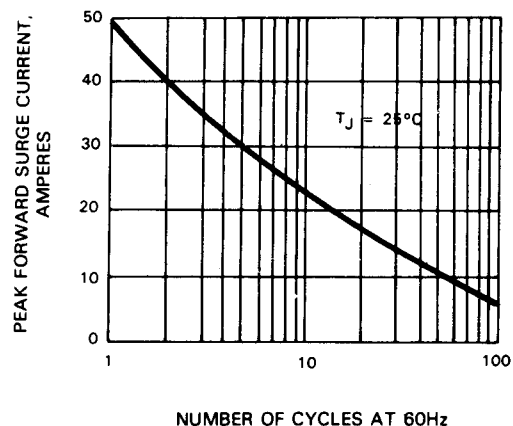


Fig. 3 — FORWARD CURRENT DERATING CURVE

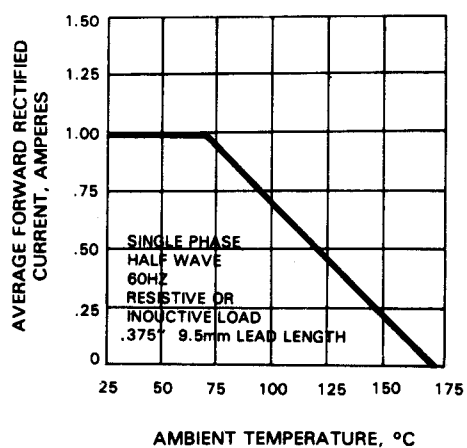
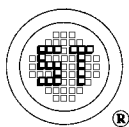
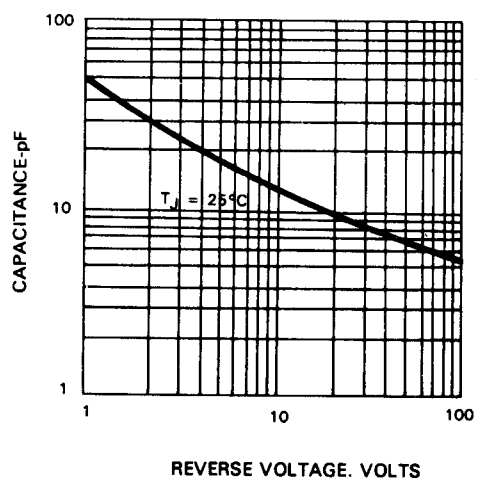


Fig. 4 — TYPICAL JUNCTION CAPACITANCE



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