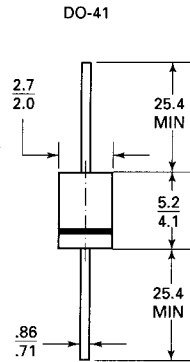


1N4001...1N4007 PLASTIC SILICON RECTIFIERS

FEATURES

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



VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Amperes

Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

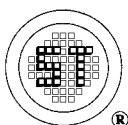
Single-phase, half-wave, 60 Hz, resistive or inductive load

| | 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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1N4001...1N4007 PLASTIC SILICON RECTIFIERS

Fig. 1 - TYPICAL FORWARD CHARACTERISTICS

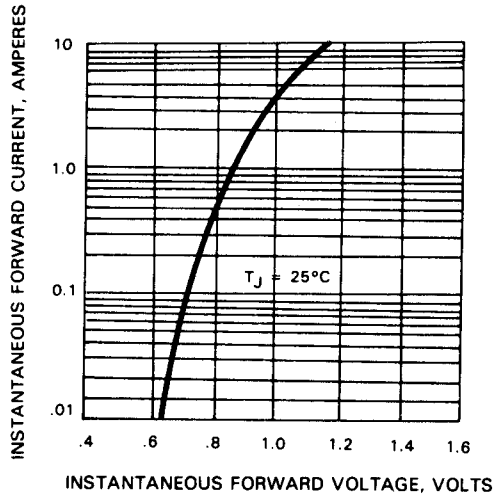


Fig. 2 - PEAK FORWARD SURGE CURRENT

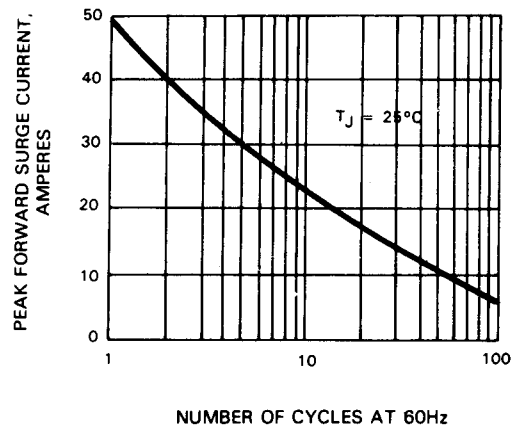


Fig. 3 - FORWARD CURRENT DERATING CURVE

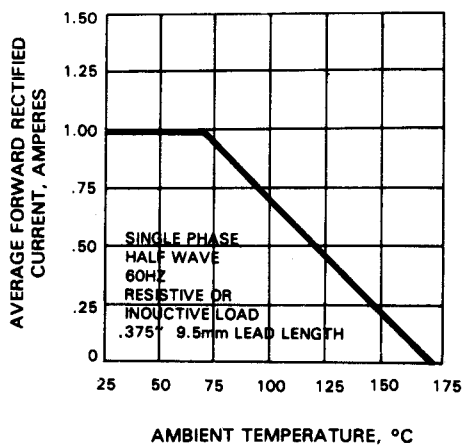
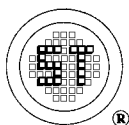
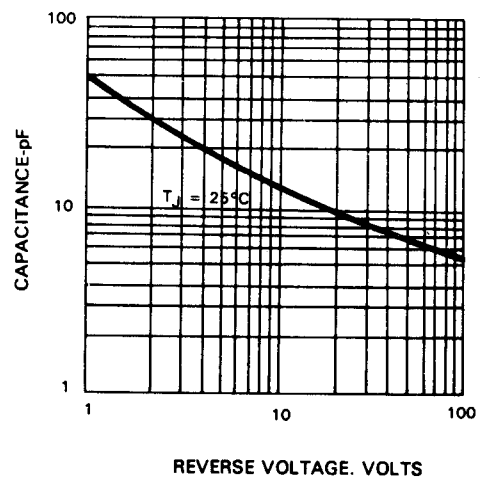


Fig. 4 - TYPICAL JUNCTION CAPACITANCE



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