

1N4001 THRU 1N4007

GENERAL PURPOSE SILICON RECTIFIER

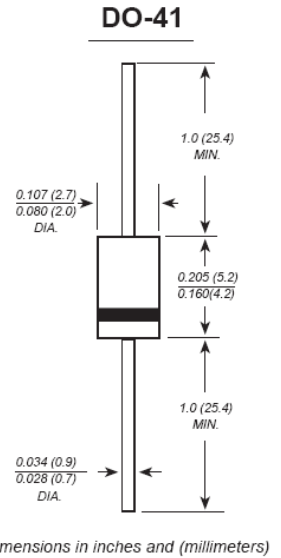
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case:** JEDEC DO-41 molded plastic body
- Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity:** Color band denotes cathode end
- Mounting Position:** Any
- Weight:** 0.012 ounce, 0.33 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

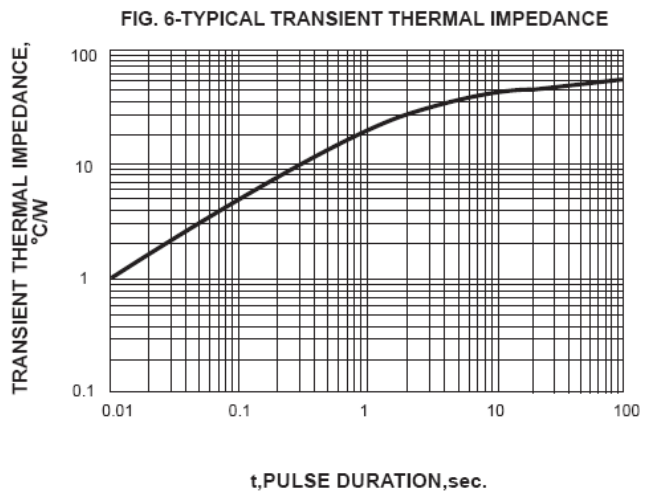
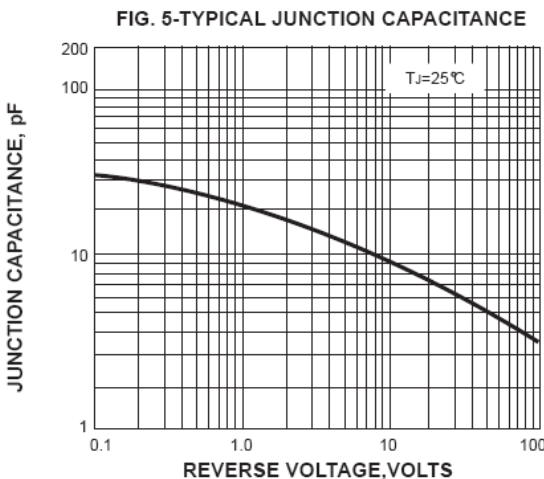
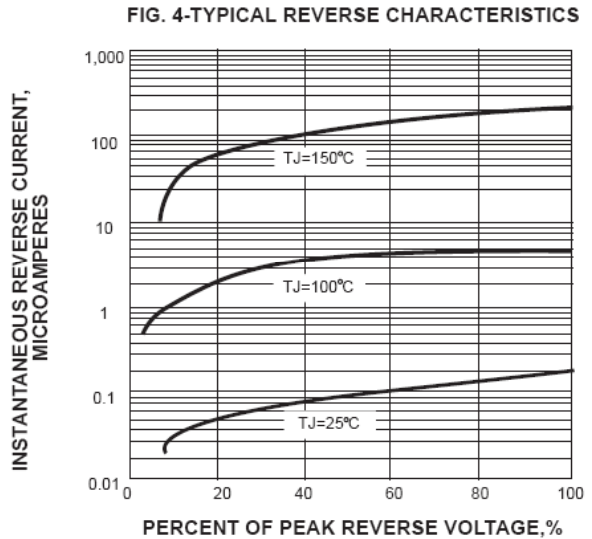
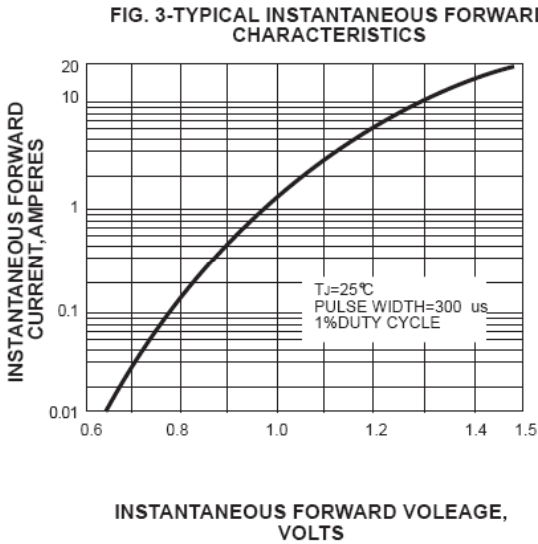
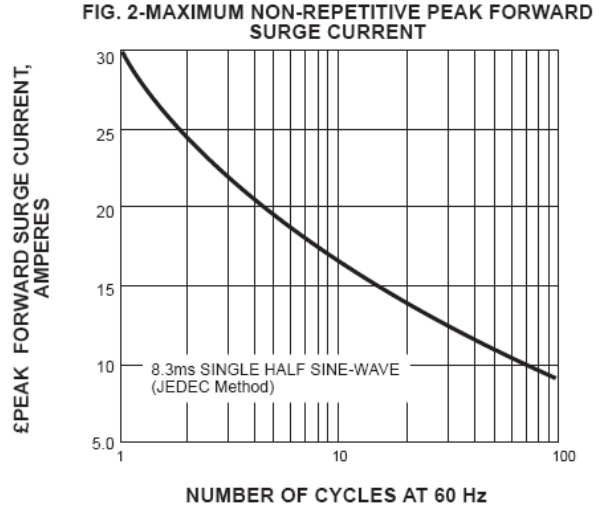
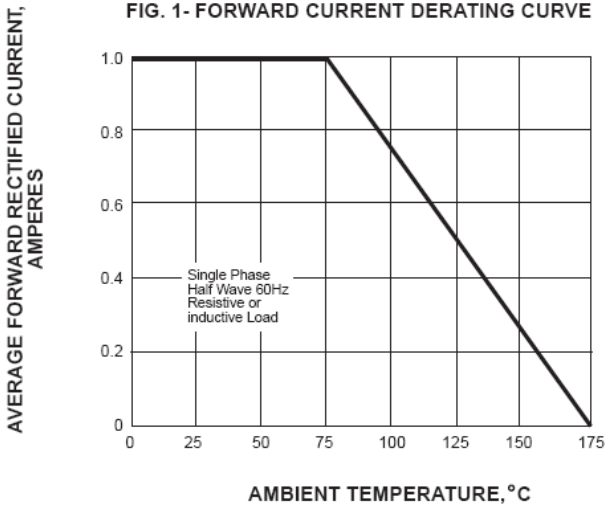
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=75°C	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.1							Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	I _R	5.0 50.0							uA
Typical junction capacitance (NOTE 1)	C _J	15.0							pF
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175							°C

- Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007



Note: Specifications are subject to change without notice.