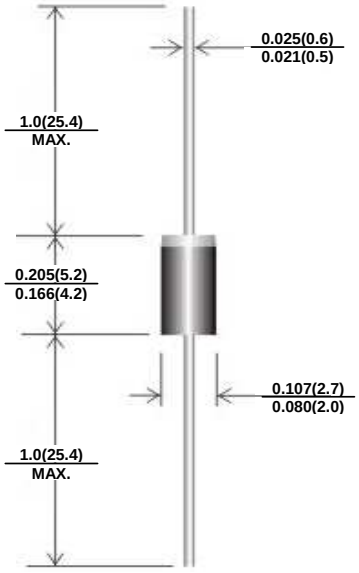
1N4001S THRU 1N4007S

GENERAL PURPOSE RECTIFIERS

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

A-405



Dimensions in inches and (millimeters)

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
- Low forward voltage drop
- High 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: A-405 Molded plastic
Terminals: Solderable per MIL-STD-750，Method 2026
Approx. Weight: 0.008 ounces, 0.22 gram
Polarity: Color band denotes cathode end
Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOLS	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S	1N 4007S	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	10 0	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Minimum DC Breakdown Voltage	V_R	50	10 0	200	400	600	800	1000	Volts
Average Rectified current at T_L =75℃	$I_{F(AV)}$	1.0							Amp
Non-repetitive Peak Forward Surge Current at 1=8.3ms	I_{FSM}	30							Amps
Maximum Forward Voltage at IF=1.0A	V_F	1.1							Volts
Reverse Leakage Current at VRRM TJ=25℃ TJ=100℃	I_R	5.0 500							μA
Typical Junction Capacitance (NOTE 1)	C_J	50							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	50 25 17							℃/W
Operating Junction Temperature Range	T_J	150							℃
Storage Temperature Range	T_{STG}	-50 ～ +150							℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm)lead length P.C.B.mounted
3. T_J=25℃ unless otherwise specified.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

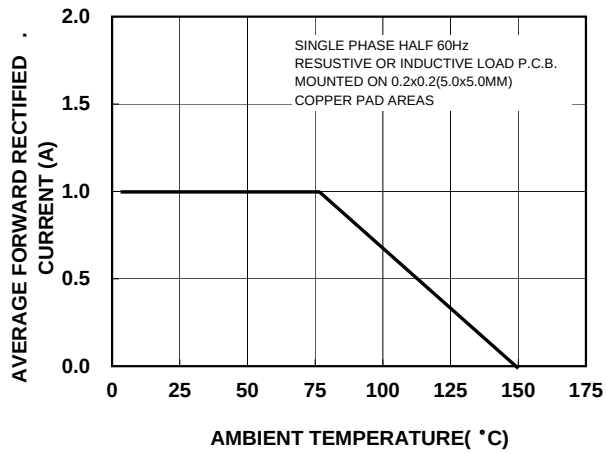

FIG. 2-MAXIMUN NON-REPETITIVE SURGE CURRENT

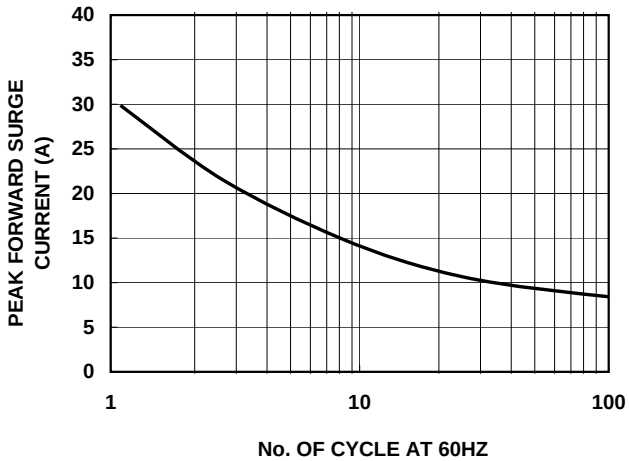

FIG. 3-TYPICAL REVERSE CHARACTERISTICS

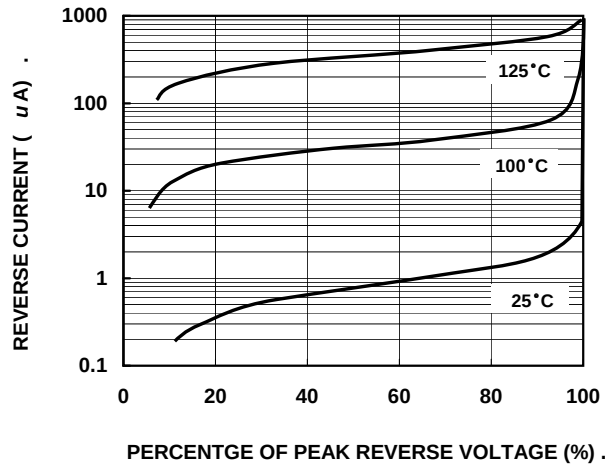

FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS