

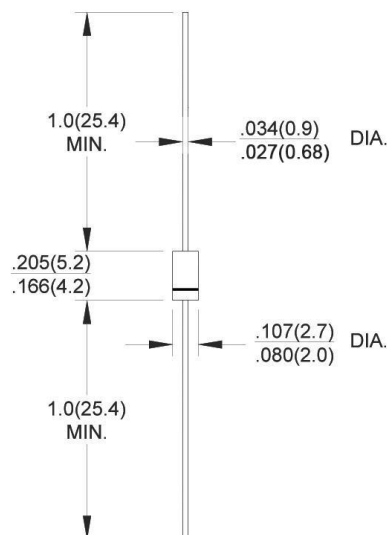
1N4001 THRU 1N4007**GENERAL PURPOSE RECTIFIER****VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere****FEATURES**

- ◆ Low forward voltage drop
- ◆ Low leakage current
- ◆ High forward surge capability
- ◆ High temperature soldering guaranteed
- ◆ 260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs(2.3kg)

tension

Mechanical Data

- ◆ Case: Transfer molded plastic
- ◆ Epoxy: UL94V-0 rate flame retardant
- ◆ Polarity: Color band denotes cathode end
- ◆ Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- ◆ Mounting position: Any
- ◆ Weight: 0.012ounce, 0.33 grams

DO-41**Dimensions in inches and (millimeters)****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS****Rating at 25°C ambient temperature unless otherwise specified.****Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%**

PARAMETER	SYMBOL	1N	1N	1N	1N	1N	1N	1N	UNIT
		4001	4002	4003	4004	4005	4006	4007	
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 at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	I_R	$T_A = 25^\circ\text{C}$							uA
		$T_A = 125^\circ\text{C}$							
Typical Junction Capacitance (NOTE 1)	C_J	30							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	15							°C/W
Operating and Storage Temperature Range	T_I, T_{STG}	-55 to +150							°C

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance from Junction to Ambient at .375"(9.5mm)lead length, P.C. board mounted.

1N4001 THRU 1N4007

GENERAL PURPOSE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

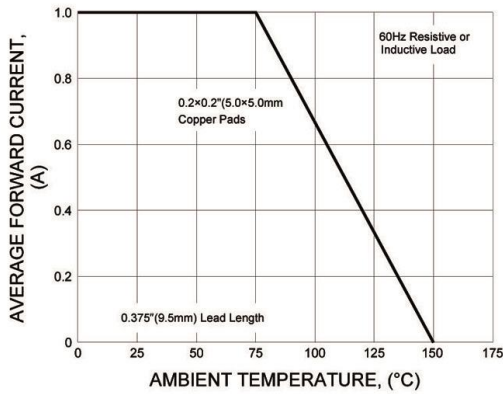


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

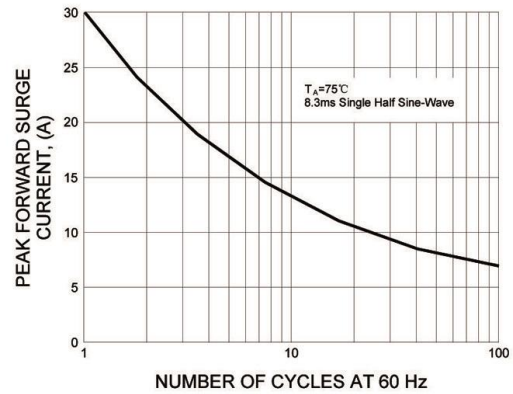


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

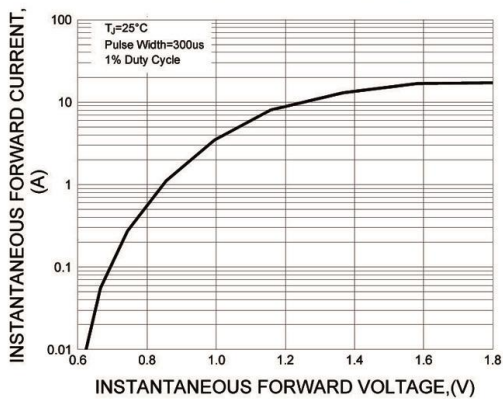


FIG.4-TYPICAL REVERSE CHARACTERISTICS

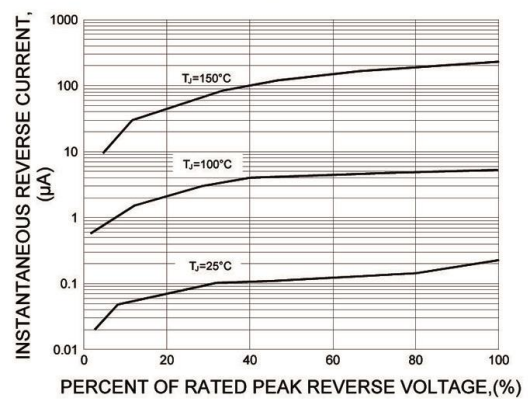
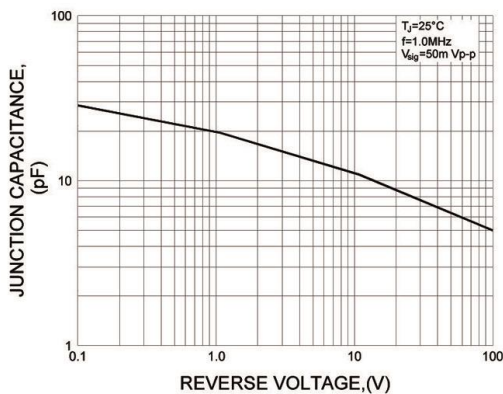


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.