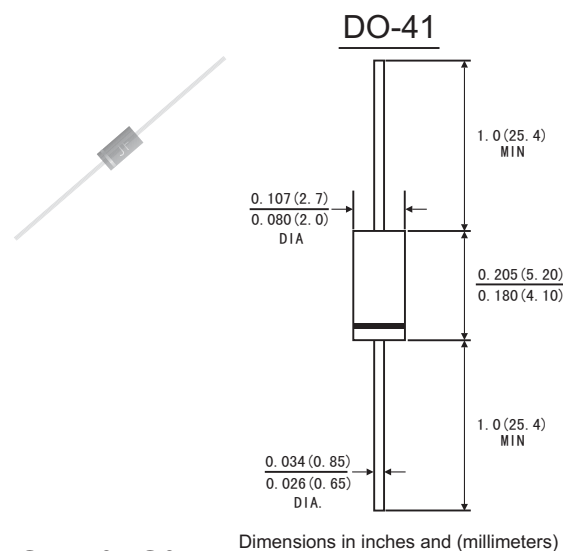


### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- 0.375"(9.5mm) lead length, 5lbs.(2.3kg).
- Component in accordance to RoHs 2011/65/EU

### MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.012ounce, 0.33 gram



### 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, derate by 20%.)

	Symbols	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	Unis
Maximum Recurrent 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	$I(AV)$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	$V_F$	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage	$I_R$	$T_A=25^{\circ}C$	5.0						$\mu A$
		$T_A=100^{\circ}C$	50.0						
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	65.0							$^{\circ}C/W$
Typical Junction Capacitance(Note 1)	$C_J$	10.0							Pf
Maximum DC Blocking Voltage temperature	$T_A$	+150							$^{\circ}C$
Operating and Storage temperature Range	$T_J$	-55 to+125							$^{\circ}C$
	$T_{STG}$	-55 to+150							

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. mounted

# RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

FIG.1-FORWARD CURRENT DERATING CURVE

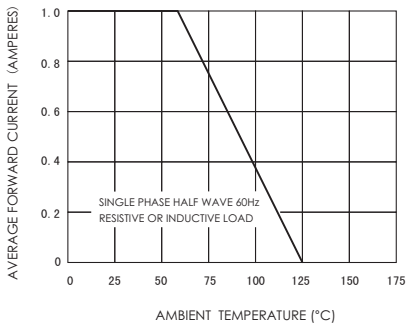


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

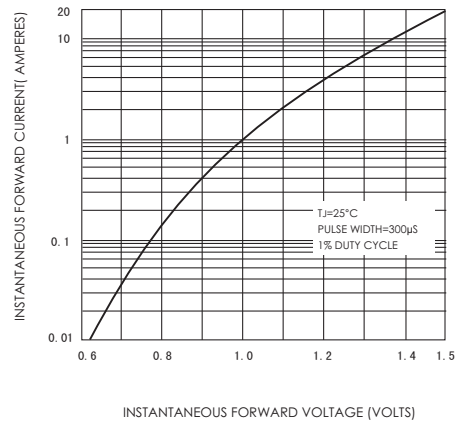


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

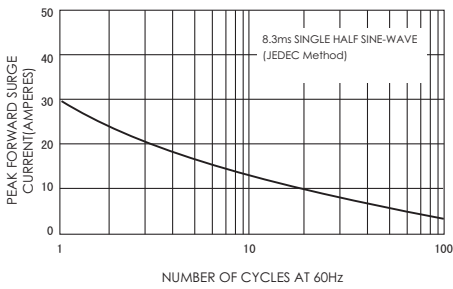


FIG.4-TYPICAL REVERSE CHARACTERISTICS

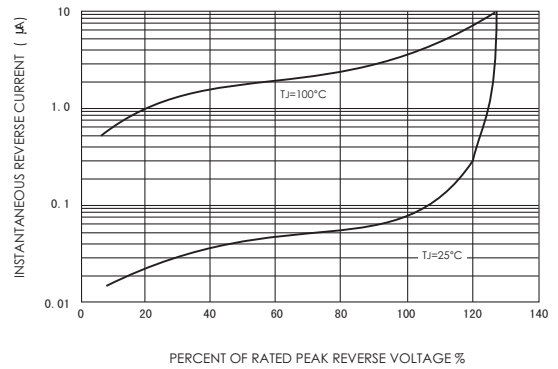


FIG.5-TYPICAL JUNCTION CAPACITANCE

