

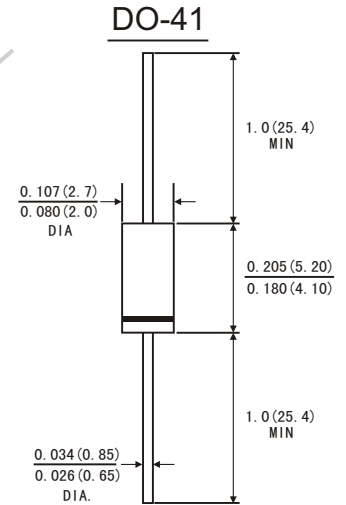


FEATURES

- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 1.0Ampere operation at $T_a=75^{\circ}\text{C}$ and 55°C with no thermal runaway
- Typical IR less than 0.1 μA
- High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ seconds at terminals
- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified)

		Symbols	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	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 0.375"(9.5mm) lead length at $T_A=75^{\circ}\text{C}$		$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) $T_A=75^{\circ}\text{C}$		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	$T_c = 25^{\circ}\text{C}$	I_R	5.0							μA
	$T_c = 125^{\circ}\text{C}$		100.0							
Typical Thermal resistance (Note 2)		$R_{\theta JA}$	65.0							$^{\circ}\text{C}/\text{W}$
Typical Junction Capacitance(Note 1)		C_J	10.0							pF
Operating and Storage temperature Range		T_J T_{STG}	-65 to +175							$^{\circ}\text{C}$

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

2. Mount on Cu-Pad Size 5mm \times 5mm on P. C. B.



FIG.1-FORWARD CURRENT DERATING CURVE

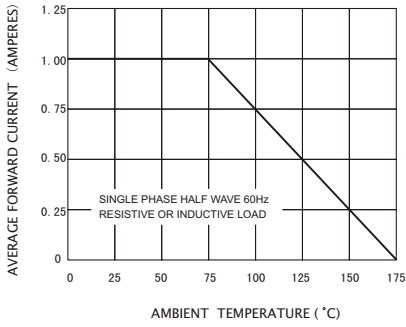


FIG.2-TYPICAL FORWARD CHARACTERISTICS

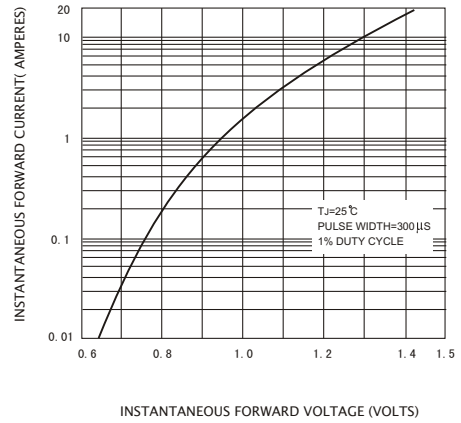


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

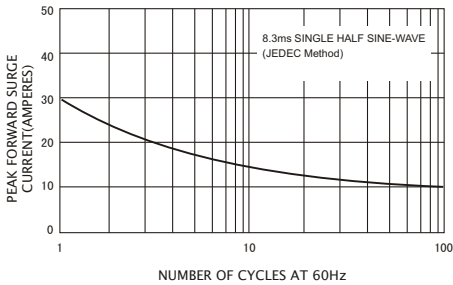


FIG.4-TYPICAL REVERSE CHARACTERISTICS

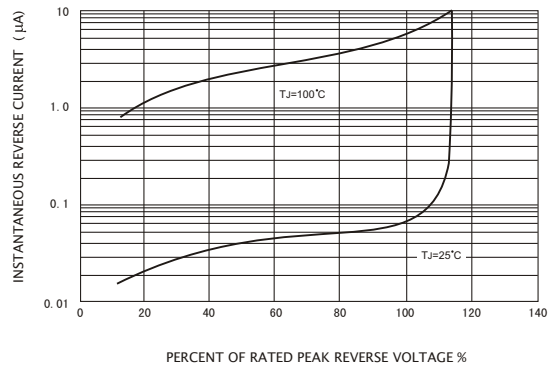


FIG.5-TYPICAL JUNCTION CAPACITANCE

