1N4001E THRU 1N4007E

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V CURRENT: 1.0A

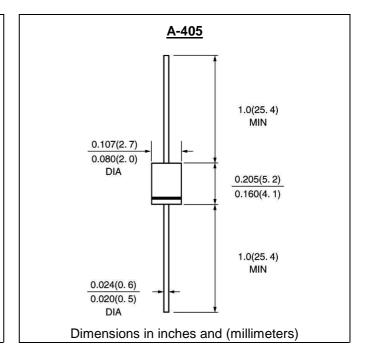


FEATURE

Molded case feature for auto insertion High current capability Low leakage current High surge capability High temperature soldering guaranteed 250°C/10sec/0.375"lead length at 5 lbs tension

MECHANICAL DATA

Terminal:Plated axial leads solderable per
MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

		SYMBOL	1N4 001E	1N4 002E	1N4 003E	1N4 004E	1N4 005E	1N4 006E	1N4 007E	units
Maximum Recurrent Peak Reverse Voltage		Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage		Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =75°C		If(av)	1.0							Α
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load		Ifsm	30.0						Α	
Maximum Instantaneous Forward Voltage at rated forward current		Vf	1.1						V	
Maximum full load reverse current full cycle at $T_L = 75$ °C		Ir(av)				30.0				μΑ
Maximum DC Reverse Current at rated DC blocking voltage	Ta =25°C Ta =100°C	lr	5.0 50.0					μA μA		
Typical Junction Capacitance	(Note 1)	Cj				15.0				pF
Typical Thermal Resistance (Note 2)		R(ja)	50.0							°C/W
Storage and Operation Junction Te	Tstg	-50 to +150							°C	

Note:

- 1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

1

Rev.A6 www.gulfsemi.com

2

20 10

0.1

0.0

0.6

0.8

1.0

Instantaneous Forward Current (A)

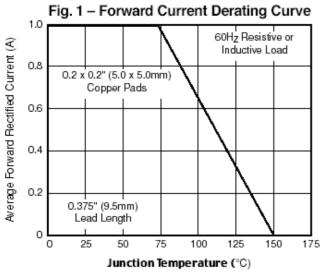


Fig. 3 – Typical Instantaneous
Forward Characteristics

T_J = 25°C
Pulse Width = 300µs
1% Duty Cycle

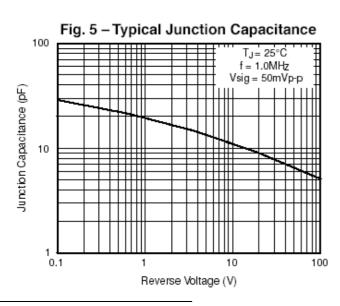
1.2

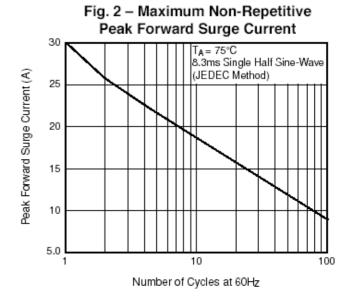
Instantaneous Forward Voltage (V)

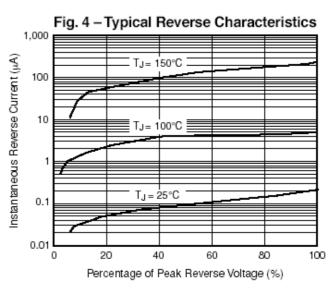
1.4

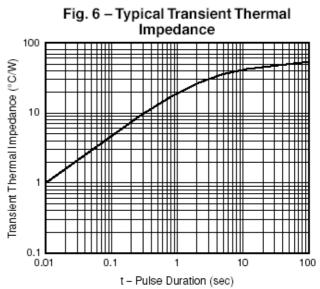
1.6

1.8









Rev.A6 www.gulfsemi.com