1N5407-E

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 600V **CURRENT:3.0A**

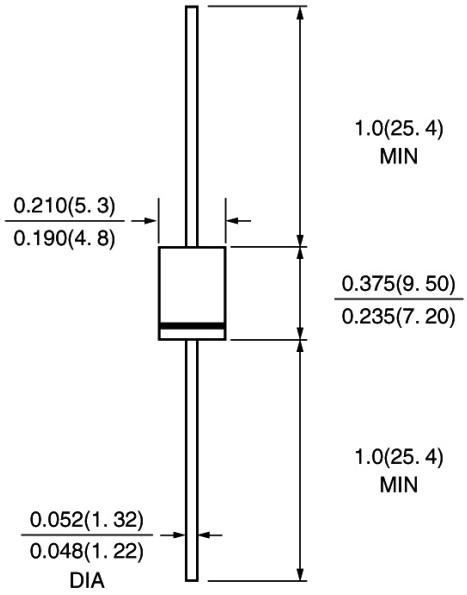
FEATURE

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
Halogen Free

MECHANICAL DATA

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

DO-201AD



Dimensions in inches and (millimeters)

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	1N5407-E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	800	V
Maximum RMS Voltage	Vrms	560	V
Maximum DC blocking Voltage	Vdc	800	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =80°C	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	200.0	A
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	μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 500.0	μA
Typical Junction Capacitance (Note 1)	Cj	30.0	pF
Typical Thermal Resistance (Note 2)	Rth(ja)	20.0	°C/W
Storage and Operation Junction Temperature	Tj, 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

RATINGS AND CHARACTERISTIC CURVES 1N5407-E

FIG.1 - FORWARD CURRENT DERATING CURVE

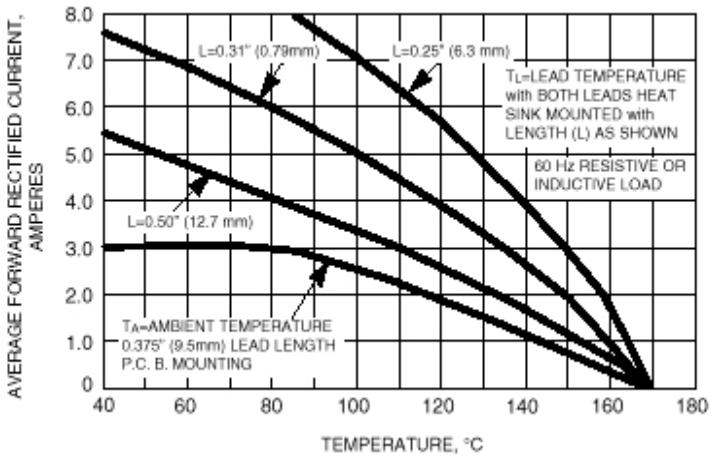


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

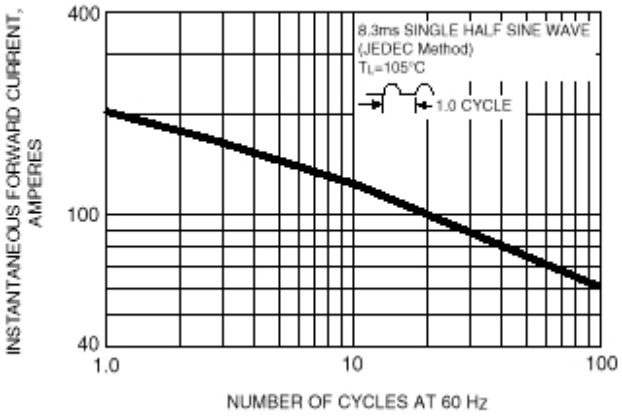


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

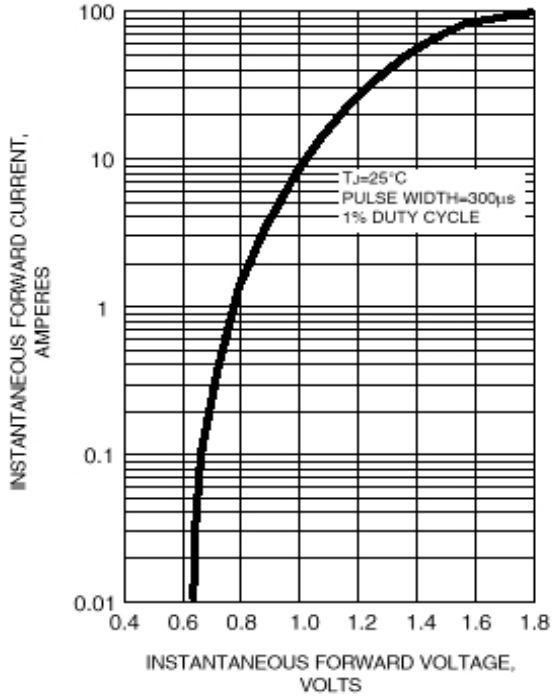


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

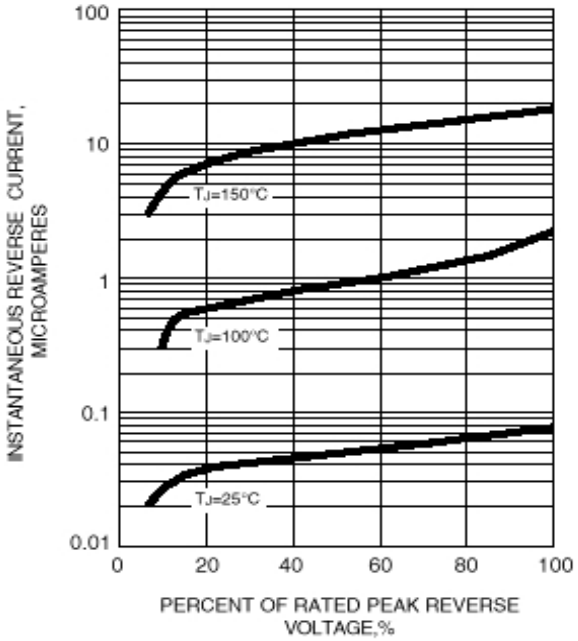


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

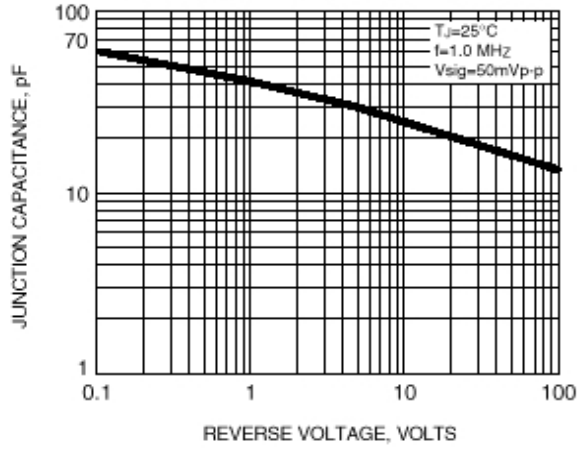


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE