

1N5400 THRU 1N5408

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V CURRENT:3.0A

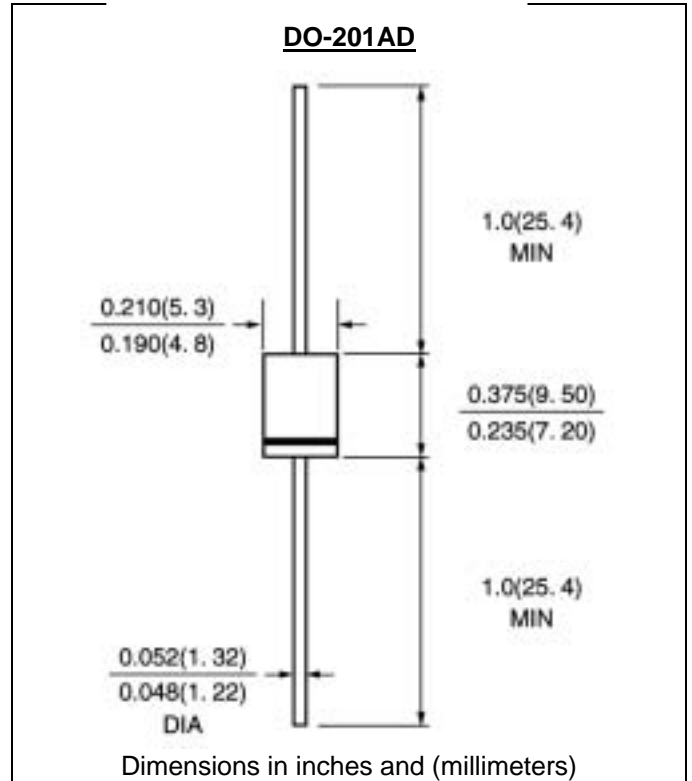


FEATURE

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

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	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at T _a =80°C	I _{f(av)}	3.0									A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I _{fsm}	200.0									A
Maximum Instantaneous Forward Voltage at rated forward current	V _f	1.1									V
Maximum full load reverse current full cycle at T _L =75°C	I _{r(av)}	30.0									μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I _r	5.0 500.0									μA μA
Typical Junction Capacitance (Note 1)	C _j	30.0									pF
Typical Thermal Resistance (Note 2)	R(ja)	20.0									°C/W
Storage and Operation Junction Temperature	T _{stg}	-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 1N5400 THRU 1N5408

FIG. 1 - FORWARD CURRENT DERATING CURVE

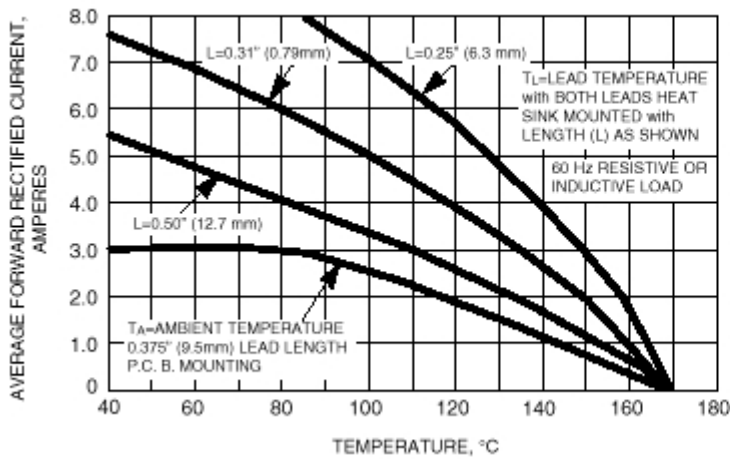


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

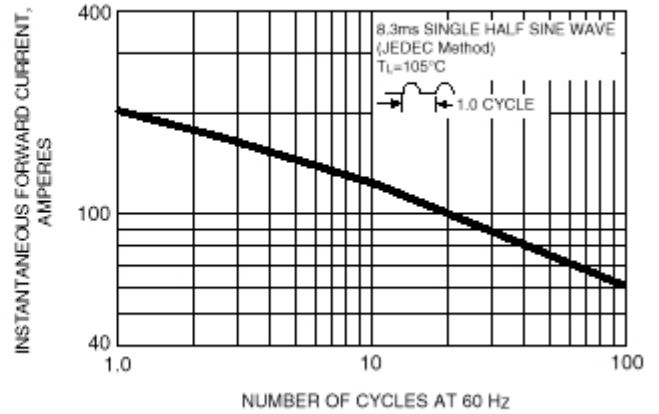


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

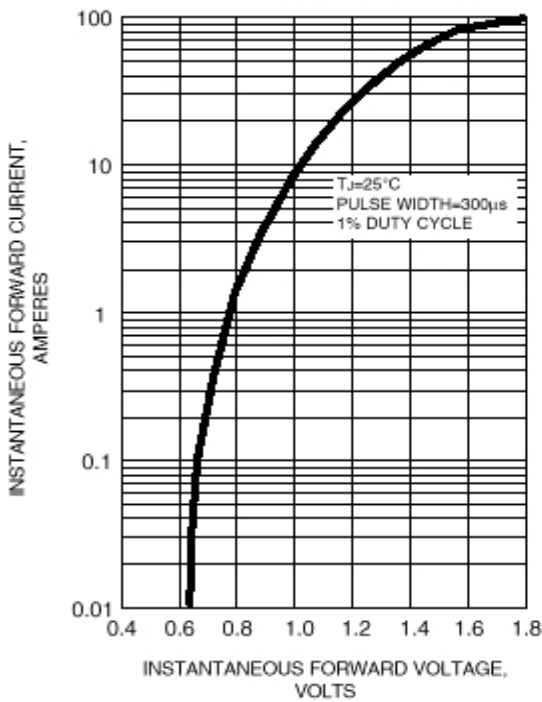


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

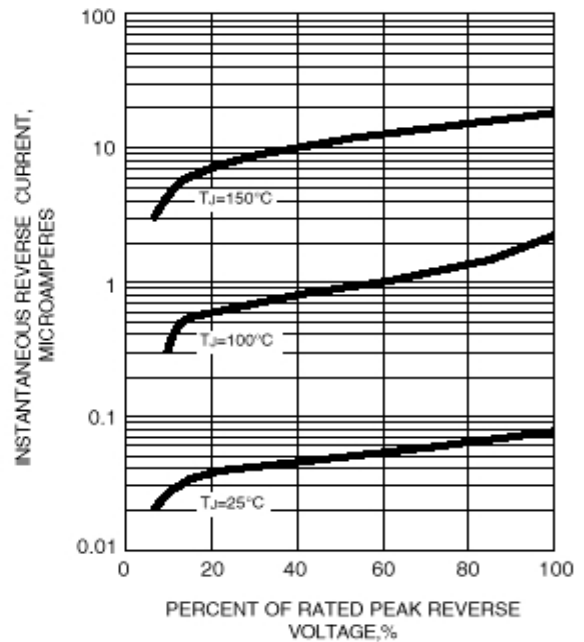


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

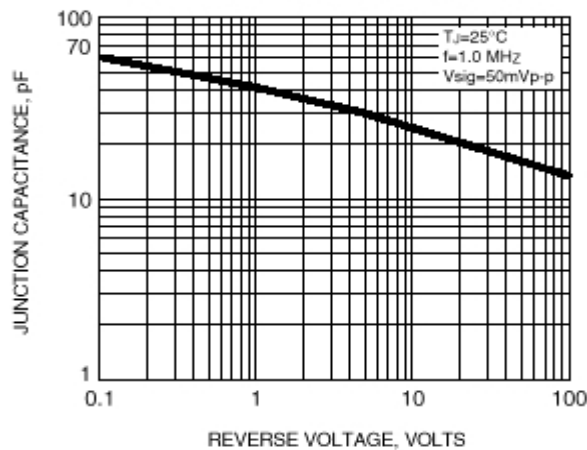


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

