



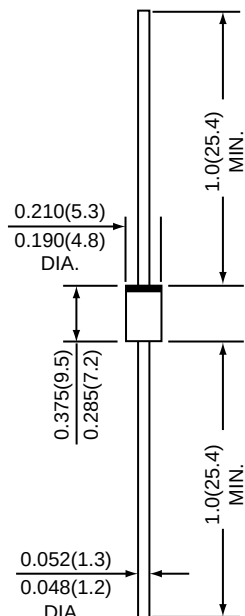
1N5400 THRU 1N5408

SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 3.0 Amperes

DO-201AD



*Dimensions in inches and (millimeters)



FEATURES

- * The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- * High surge current capability
- * Construction utilizes void-free molded plastic technique
- * 3.0A operation at $T_L=105^{\circ}\text{C}$ with no thermal runaway
- * Typical I_R less than 0.1uA
- * High temperature soldering guaranteed :
260°C / 10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case : JEDEC DO-201AD Molded plastic body

Terminals : Plated axial leads, solderable per MIL-STD-750,
Method 2026

Polarity : Color band denotes cathode end

Mounting Position : Any

Weight : 0.04 ounce, 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNITS
Maximum repetitive 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 $T_L=105^{\circ}\text{C}$	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							Amps
Maximum instantaneous forward voltage at 3.0 A	V_F	1.1							Volts
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at $T_L=75^{\circ}\text{C}$	$I_{R(AV)}$	30							uA
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}\text{C}$ $T_A=100^{\circ}\text{C}$	I_R	5 50							uA
Typical junction capacitance 4.0V, 1MHz	C_J	40							pF
Typical thermal resistance	$R_{\theta JA}$	30							$^{\circ}\text{C} / \text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^{\circ}\text{C}$

RATINGS AND CHARACTERISTIC CURVES 1N5400 THRU 1N5408

FIG.1 - FORWARD CURRENT DERATING CURVE

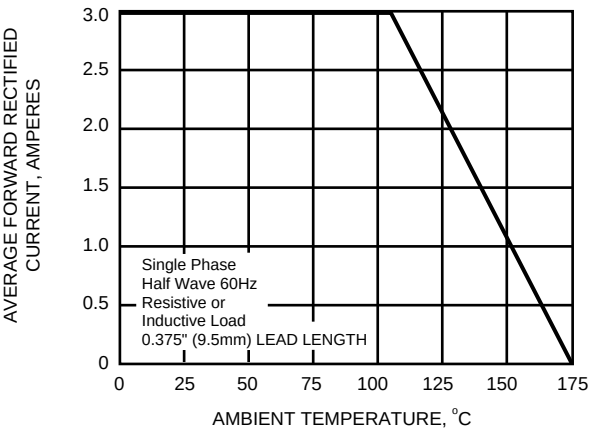


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

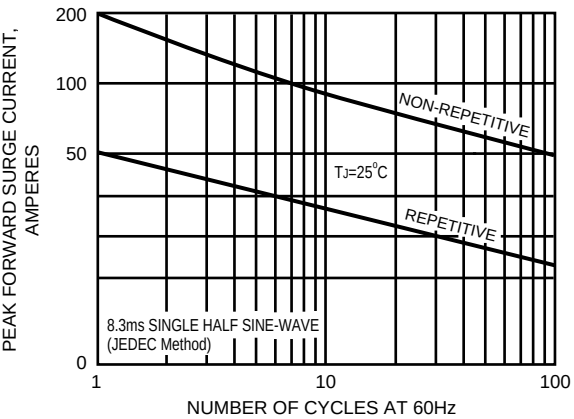


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

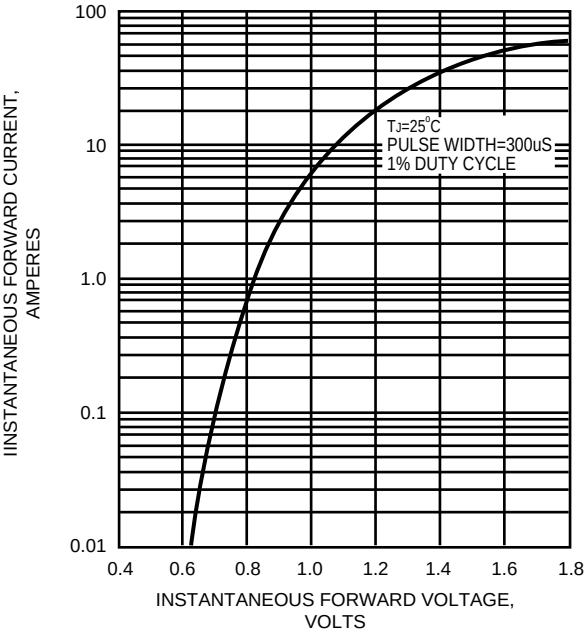


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

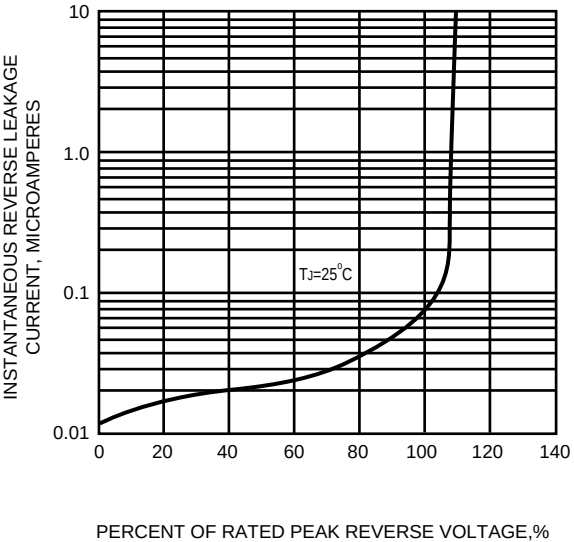


FIG.5 - TYPICAL JUNCTION CAPACITANCE

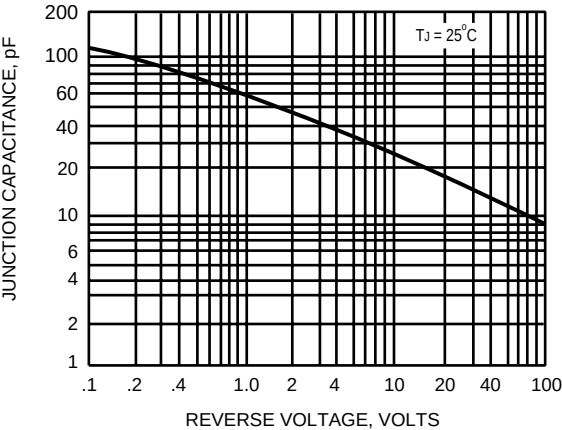


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

