

1N5400 THRU 1N5408(FORM LEAD)

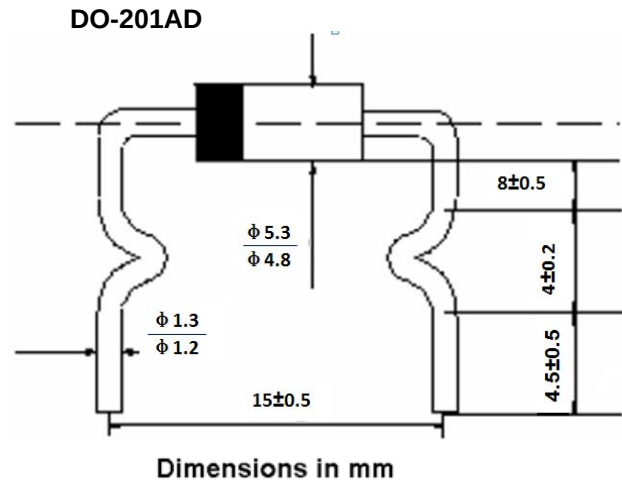
GENERAL PURPOSE PLASTIC SILICON RECTIFIER

Reverse Voltage - 50 to 1000 V

Forward Current - 3.0 A

Features

- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

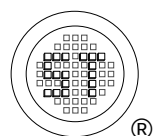


Absolute Maximum Ratings and Characteristics

Ratings at $T_a = 25^\circ\text{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter		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 (9.5 mm) lead length at $T_a = 75^\circ\text{C}$	$I_{F(AV)}$	3									A
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	150									A
Maximum forward voltage at 3A peak	V_F	1									V
Maximum reverse current, $T_a = 25^\circ\text{C}$ at Rated DC blocking voltage $T_a = 100^\circ\text{C}$	I_R	10 100									uA uA
Typical thermal resistance	R_{QJA}	20									$^\circ\text{C/W}$
Typical Junction capacitance ¹⁾	C_j	50									pF
Operating temperature range	T_j	-55 to + 150									$^\circ\text{C}$
Storage temperature range	T_{Stg}	-55 to + 150									$^\circ\text{C}$

¹⁾Measured at 1 MHz and applied reverse voltage of 4 V_{DC} .



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Fig. 1-TYPICAL FORWARD CHARACTERISTICS

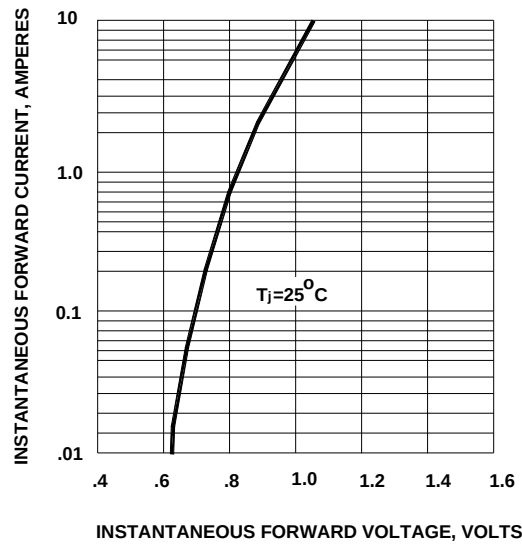


Fig. 2-PEAK FORWARD SURGE CURRENT

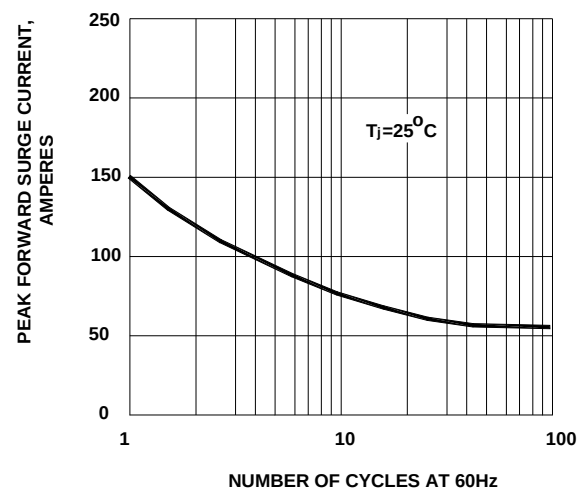


Fig. 3-FORWARD CURRENT DERATING CURVE

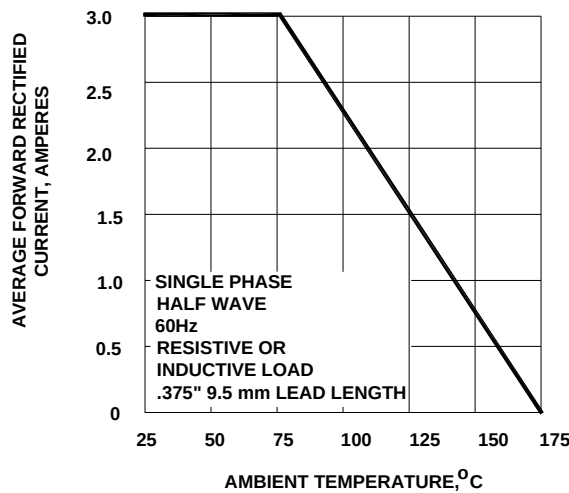


Fig. 4-TYPICAL JUNCTION CAPACITANCE

