

1N5400G THRU 1N5408G

GLASS PASSIVATED SILICON RECTIFIERS

Reverse Voltage - 50 to 1000 V

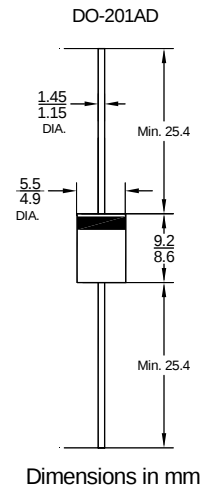
Forward Current - 3 A

Features

- High current capability
- Glass passivated junction
- Low forward voltage drop
- Low reverse leakage
- The plastic package carries UL flammability classification 94V-0

Mechanical Data

- Case: Molded plastic, DO-201AD (DO-27)
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: color band denotes cathode end
- Mounting Position: Any



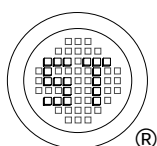
Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	1N5400G	1N5401G	1N5402G	1N5403G	1N5404G	1N5405G	1N5406G	1N5407G	1N5408G	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 0.375" (9.5 mm) Lead Length at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	3									A
Peak Forward Surge Current, 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load at $T_j = 125^\circ\text{C}$	I_{FSM}	200									A
Maximum Forward Voltage at 3 A DC	V_F	1.1									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									μA
Typical Junction Capacitance ¹⁾	C_J	35									pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	20									$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	- 55 to + 175									$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175									$^\circ\text{C}$

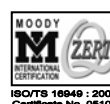
¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V DC.

²⁾ Thermal resistance from junction to ambient.



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FIG.1 –FORWARD CURRENT DERATING CURVE

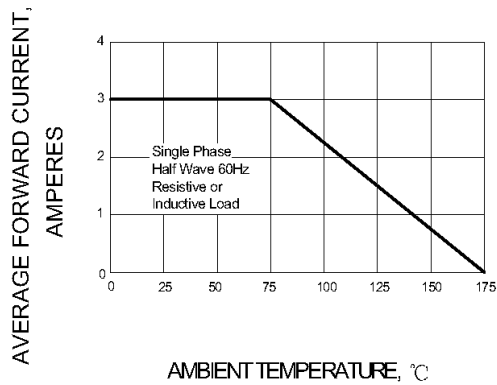


FIG.2-TYPICAL FORWARD CHARACTERISTIC

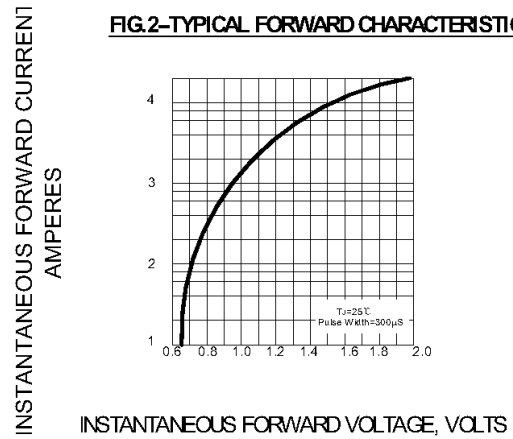


FIG.3 -- PEAK FORWARD SURGE CURRENT

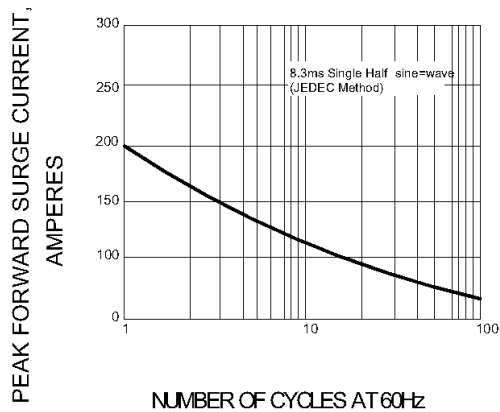


FIG.4 – TYPICAL JUNCTION CAPACITANCE

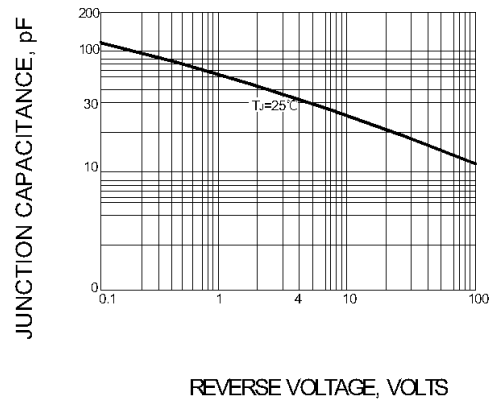
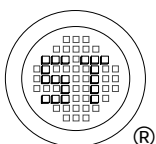
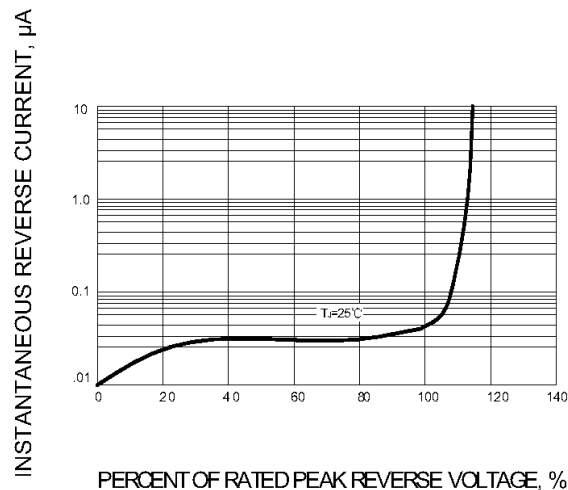


FIG.5 – TYPICAL REVERSE CHARACTERISTICS



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