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DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N5400 THRU 1N5408

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 3.0 Ampere

FEATURES

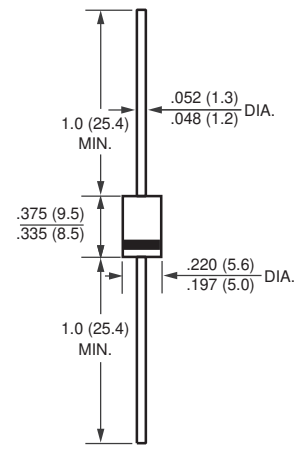
* Low cost
* Low leakage
* Low forward voltage drop
* High current capability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rated flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 1.18 gram approx.



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Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL 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%.

		SYMBOL	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNITS
Maximum Recurrent 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}	500	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_A = 75°C		I_O	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	200							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T_A=25°C	I_R	5.0							μAmps
	@ T_A=100°C		500							
Maximum Full Load Reverse Current Average, Full Cycle .375"(9.5mm) lead length at T_L = 55°C			30							
Typical Junction Capacitance (Note)		C_J	40							pF
Typical Thermal Resistance		$R_{\theta JA}$	30							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-65 to +175							°C

Note: Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

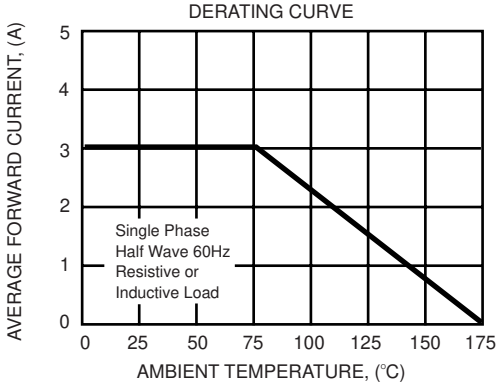


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

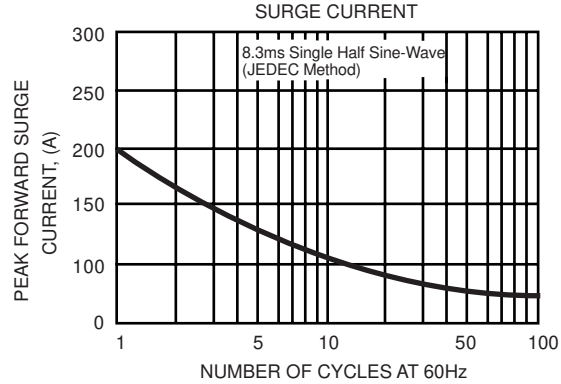


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

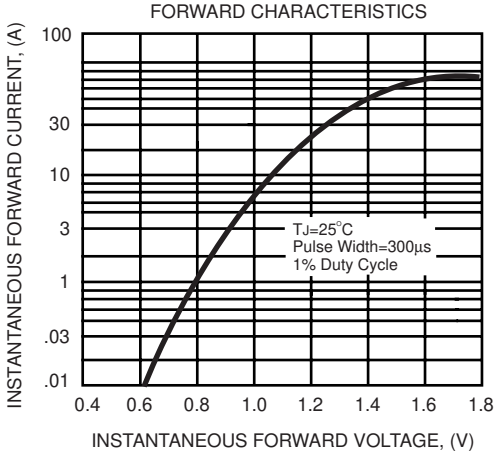


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

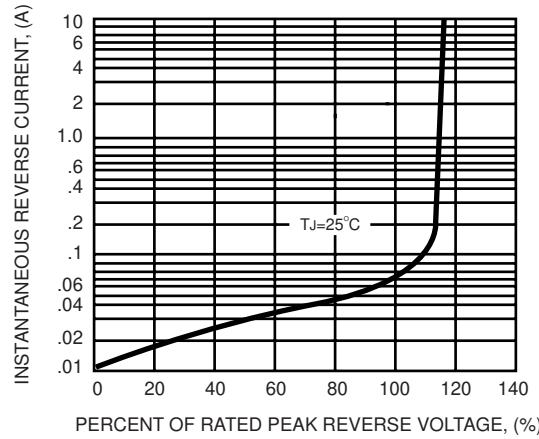


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

