

1N5400 THRU 1N5408

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER
 VOLTAGE RANGE – 50 to 1000 Volts CURRENT – 3.0 Amperes

FEATURES

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

MECHANICAL DATA

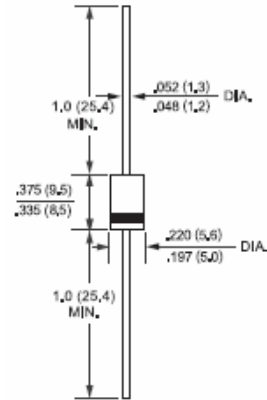
- *Case: Molded plastic
- *Epoxy: UL 94V -0 rate flame retardant
- *Lead: MIL-STD-202E, Method 208 guaranteed.
- *Polarity: Color band denotes cathode end
- *Mounting position: Any
- *Weight: 1.18 grams

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%



DO-27



	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}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length at TL =105°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 3.0ADC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^\circ C$	5.0							μ Amps
	@ $T_A=100^\circ C$	500							
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at TL=75°C	I_R	30							μ Sec
Typical Junction Capacitance (Note)	C_J	40							pF
Typical Thermal Resistance	$R_{\theta JA}$	30							°C/W

NOTES: 1. 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

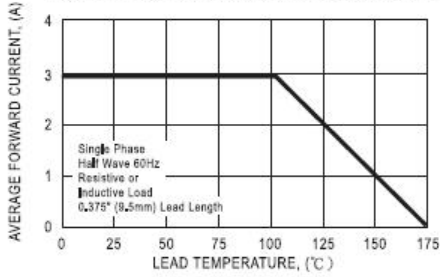


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

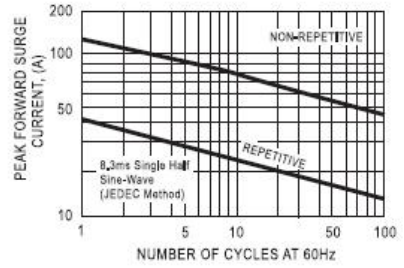


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD VOLTAGE, (V)

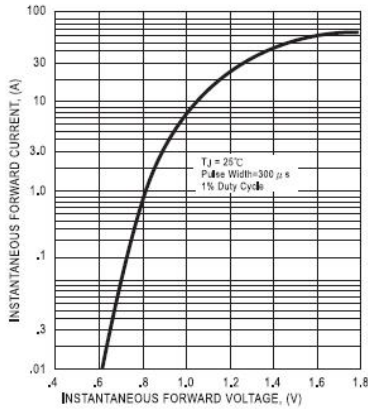


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

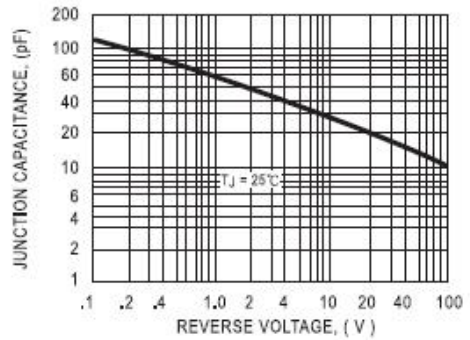


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

