



# 1N5400~1N5408

## HIGH CURRENT PLASTIC SILICON RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 3.0 Ampere

DO-201AD

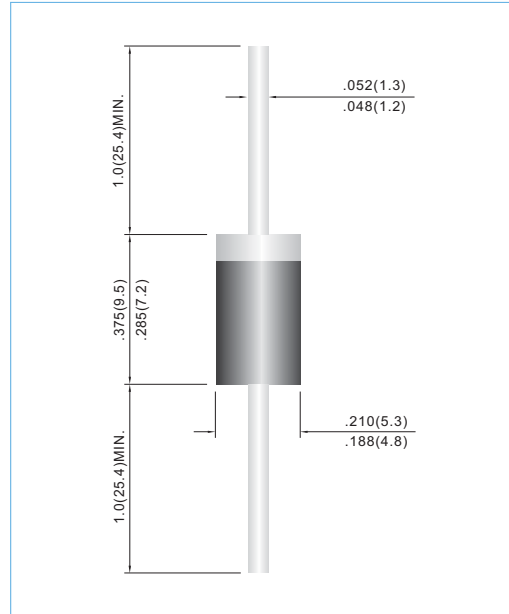
Unit: inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- High current capability
- Low leakage
- Exceeds environmental standards of MIL-S-19500/228
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: DO-201AD Molded plastic
- Lead: Axial leads, solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0395 ounces, 1.122 gram



### 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%.

PARAMETER	SYMBOL	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	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 Current .375" (9.5mm) lead length	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200									A
Maximum Forward Voltage at 3.0A	$V_F$	1.2									V
Maximum DC Reverse Current at $T_j=25^{\circ}C$ Rated DC Blocking Voltage $T_j=100^{\circ}C$	$I_R$	5.0 1000									$\mu A$
Typical Junction capacitance (Note 1)	$C_j$	30									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	35 15									$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150									$^{\circ}C$

#### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounted.



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## RATING AND CHARACTERISTIC CURVES

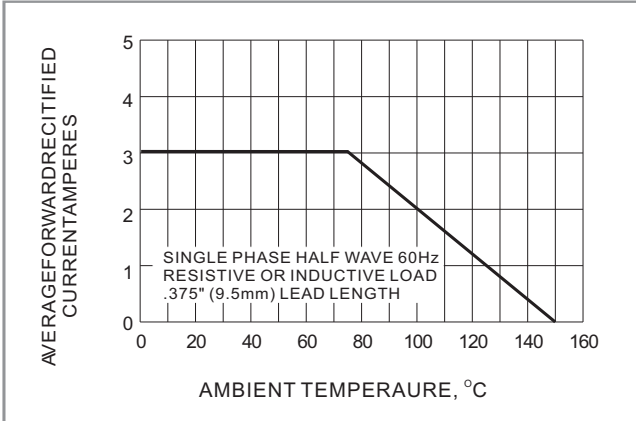


Fig.1- FORWARD CURRENT DERATING CURVE

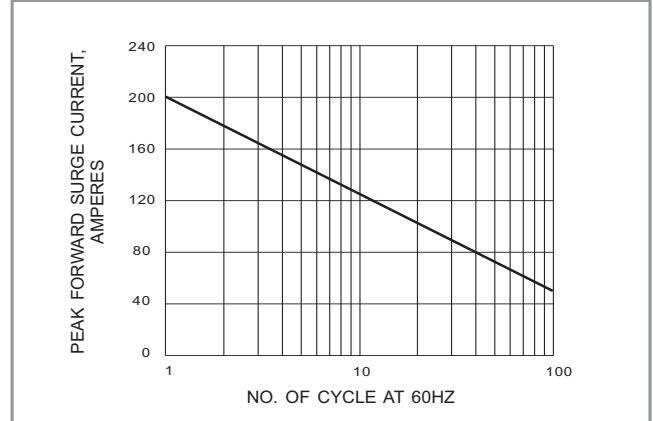


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

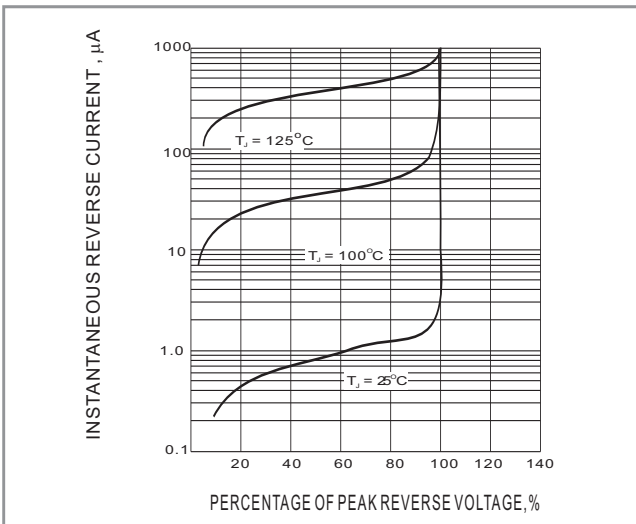


Fig.3- TYPICAL REVERSE CHARACTERISTIC

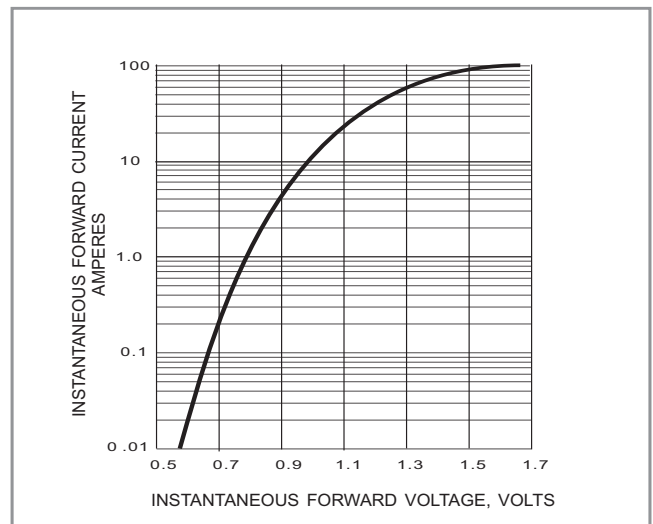


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

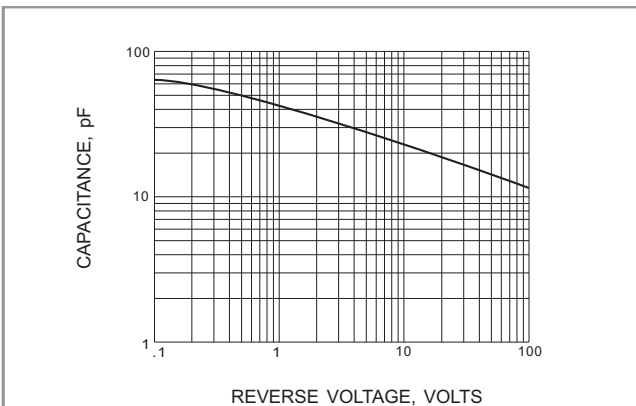


Fig.5- TYPICAL JUNCTION CAPACITANCE