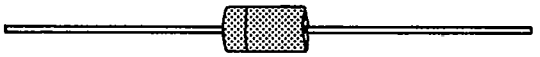
CODI Semiconductor, Inc.

High Current Plastic Silicon Rectifiers
1N5400 thru 1N5408



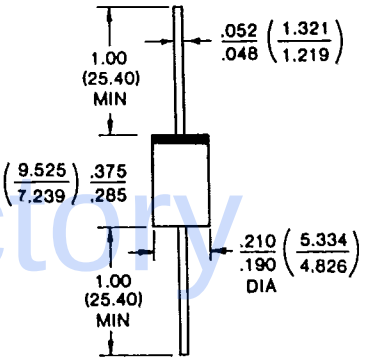
VOLTAGE RANGE
50 to 1000 PRV

CURRENT
3.0A at 105°C
1.5A at 140°C

FEATURES

- High surge current capability
- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- Void-free plastic in a DO-201-AD package
- High current operation 3.0 ampere @ $T_A = 105°C$
- Exceeds environmental standards of MIL-STD-19500/228

DO-201-AD



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case ..... Molded Plastic
Terminals Axial leads, solderable per MIL-STD-202, Method 208
Polarity ..... Color band denotes cathods
Mounting Position ..... Any
Weight ..... 0.04 ounces

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

* @$T_A = 25°C$ unless otherwise specified. Single phase, half-wave, 60Hz, resistive or inductive load.
** All values except Maximum RMS Voltage are registered JEDEC parameters.

	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage to 150°C Max.	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current at 105°C					3.0					A
at 140°C					1.5					A
Maximum Overload Surge Current at 1 cycle					200					A
Maximum Forward Voltage at 3.0 ADC					1.2					V
Maximum Full Load Reverse Current Full Cycle Average at 105°C					0.5					mADC
Maximum DC Reverse Current at Rated DC Blocking Voltage and 150°C					0.5					mADC
Operating Temperature Range					−65 to +170					°C
Storage Temperature Range					−65 to +175					°C

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RATING AND CHARACTERISTIC CURVES
1N5400 thru 1N5408

Fig. 1–Typical Reverse Characteristics

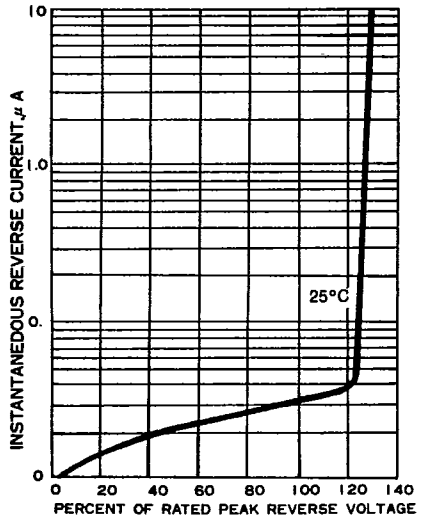


Fig. 2–Forward Derating Curve

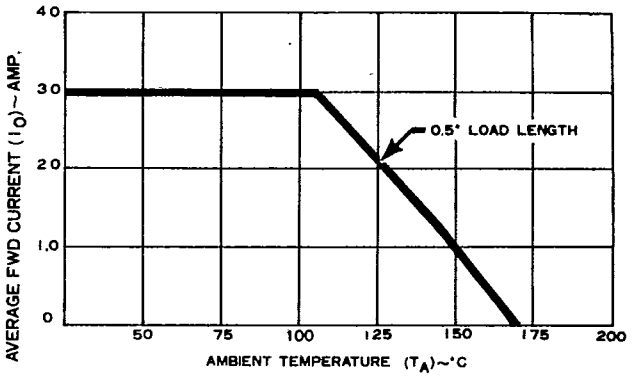
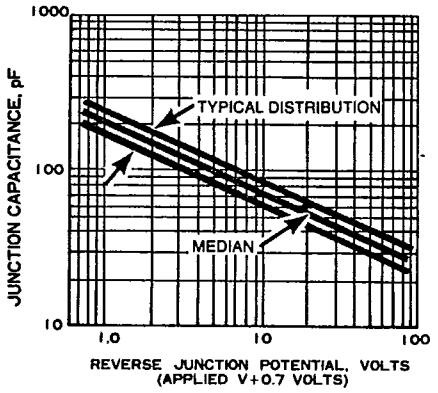


Fig. 3–Capacitance Characteristics



NOTE: WHEN PLOTTING CAPACITANCE VERSUS VOLTAGE, IT IS CONVENIENT TO PLOT ON LOG-LOG PAPER AND TO PLOT APPLIED VOLTAGE PLUS BARRIER POTENTIAL (BARRIER POTENTIAL = 0.7 VOLTS) AS THE ABSCISCA. THIS WILL GIVE A STRAIGHT LINE OF SLOPE APPROXIMATELY 1/2 OF WHICH CAN BE EASILY EXTRAPOLATED. CAPACITANCE AT ZERO APPLIED VOLTS IS FOUND AT 0.7 VOLTS ON THE PLOT. THIS TECHNIQUE WAS USED FOR THE CURVE SHOWN.

FIG. 4- Typical Forward Characteristics

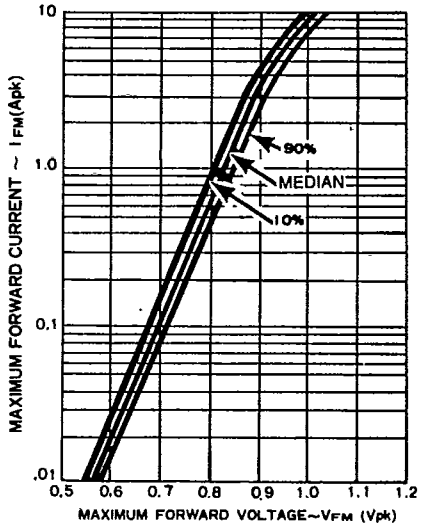


Fig. 5–Maximum Overload Surge Current