



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**R1200
THRU
R3000**

TECHNICAL SPECIFICATIONS OF HIGH VOLTAGE SILICON RECTIFIER

VOLTAGE RANGE - 1200 to 3000 Volts

CURRENT - 0.2 to 0.5 Ampere

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: 0.35 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

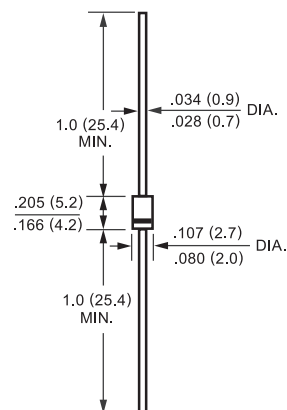
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



DO-41



Dimensions in inches and (millimeters)

	SYMBOL	R1200	R1500	R1800	R2000	R2500	R3000	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1200	1500	1800	2000	2500	3000	Volts
Maximum RMS Volts	V _{RMS}	840	1050	1260	1400	1750	2100	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1500	1800	2000	2500	3000	Volts
Maximum Average Forward Rectified Current at T _A = 50°C	I _O	500			200			mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30						Amps
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC	V _F	2.0			3.0		4.0	Volts
Maximum DC Reverse Current @T _A = 25°C	I _R	5.0						uAmps
at Rated DC Blocking Voltage @T _A =100°C		100						
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at T _L = 75°C		30						uAmps
Typical Junction Capacitance (Note)	C _J	30						pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 175						°C

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

RA TING AND CHARACTERISTIC CURVES (R1200 THRU R3000)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

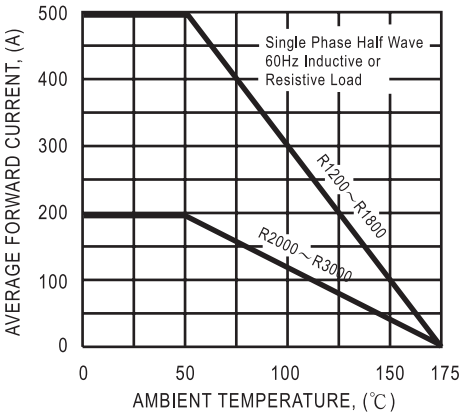


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

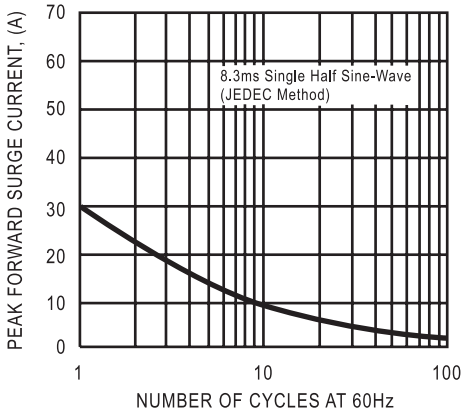
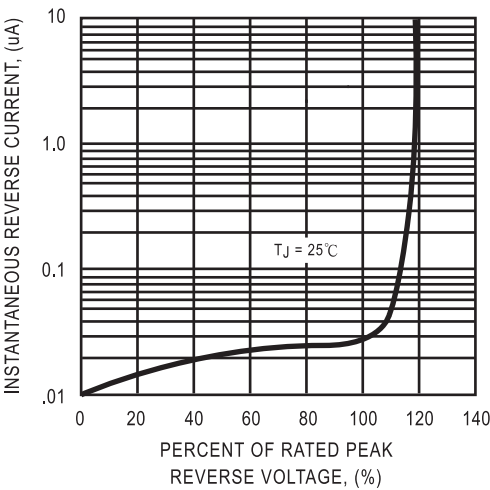


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



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