



**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**

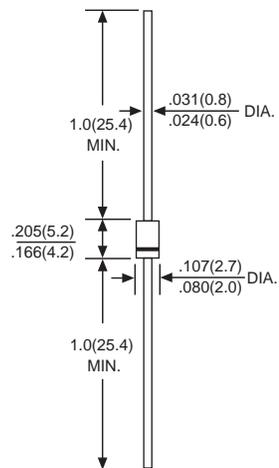
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.35 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 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



	SYMBOL	R1200	R1500	R1800	R2000	R2500	R3000	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	1200	1500	1800	2000	2500	3000	Volts
Maximum RMS Volts	V <sub>RMS</sub>	840	1050	1260	1400	1750	2100	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	1500	1800	2000	2500	3000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	I <sub>O</sub>	500			200			mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30						Amps
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC	V <sub>F</sub>	2.0		3.0		4.0		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@ TA = 25°C			5.0			uAmps
		@ TA = 100°C			100			
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at T <sub>L</sub> = 75°C		30						uAmps
Typical Junction Capacitance (Note)	C <sub>J</sub>	30						pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 175						°C

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

# RATING AND CHARACTERISTIC CURVES (R1200 THRU R3000)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

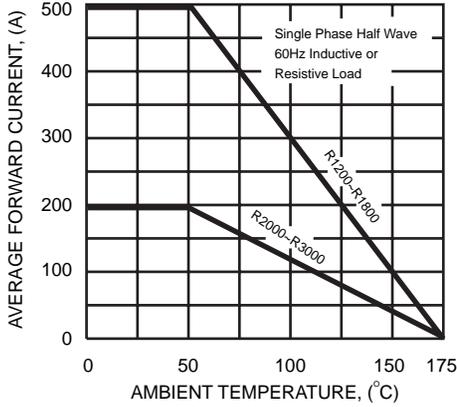


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

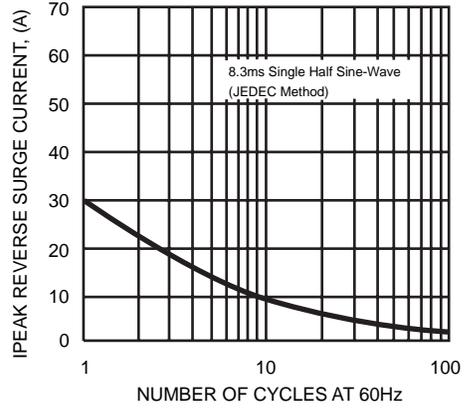
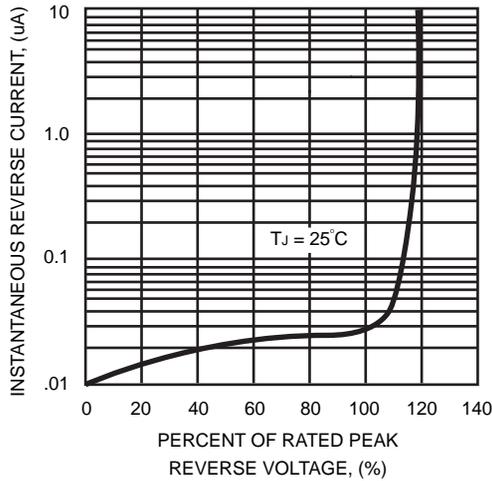


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



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