



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

R4000
THRU
R5000

TECHNICAL SPECIFICATIONS OF HIGH VOLTAGE SILICON RECTIFIER
VOLTAGE RANGE - 4000 to 5000 Volts
CURRENT - 0.2 Ampere

FEATURES

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

MECHANICAL DATA

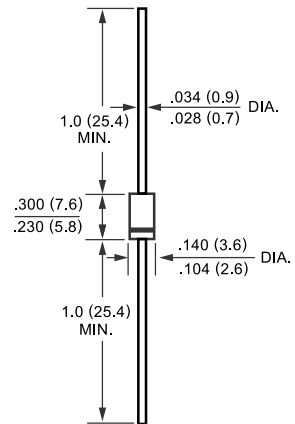
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.35 gram

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-15



Dimensions in inches and (millimeters)

	SYMBOL	R4000	R5000	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	4000	5000	Volts
Maximum RMS Volts	V _{RMS}	2800	3500	Volts
Maximum DC Blocking Voltage	V _{DC}	4000	5000	Volts
Maximum Average Forward Rectified Current at T _A = 50°C	I _O	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 0.2A DC	V _F	5.0		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ T _A = 25°C	5.0	uAmps
		@ 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.

RATING AND CHARACTERISTIC CURVES (R4000 THRU R5000)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

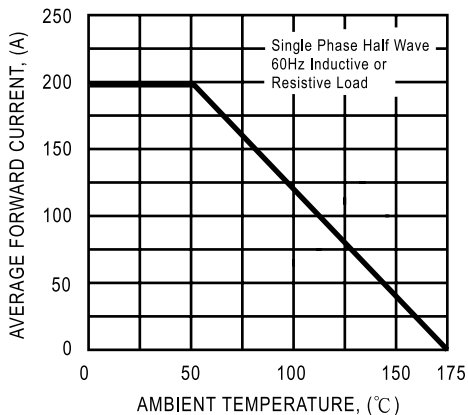


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

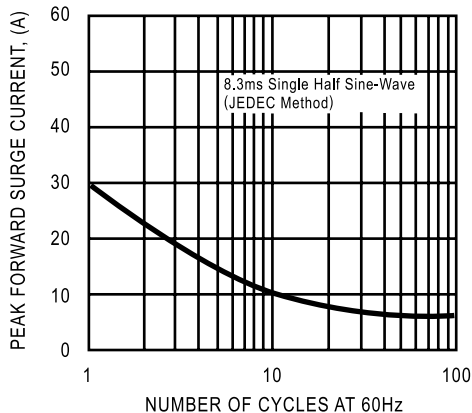
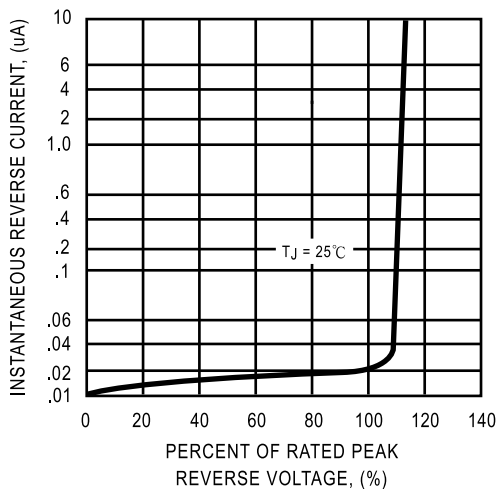


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



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