

## 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

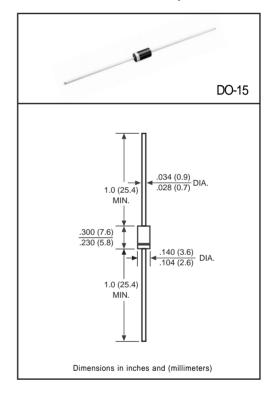
\* Lead: MIL-STD-202E, Method 208 guaranteed

\* Polarity: Color band denotes cathode end

\* Mounting position: Any \* Weight: 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Rating at 25°C ambient tempature unless ohterwise specified Single phase, half wave 60 HZ, resistive or inductive load.

For capacitive load, derate current by 20%.



		SYMBOL	R4000	R5000	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	4000	5000	Volts
Maximum RMS Volts		VRMS	2800	3500	Volts
Maximum DC Blocking Voltage		VDC	4000	5000	Volts
Maximum Average Forward Rectified Current at TA = 50°C		lo	200		mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	30		Amps
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC		VF	5	5.0	
Maximum DC Reverse Current	@TA = 25°C		5.0		- uAmps
at Rated DC Blocking Voltage	@Ta =100°C	l <sub>R</sub>	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)		Cı	3	30	
Operating and Storage Temperature Range		Тл, Тетс	-55 to	-55 to + 175	

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

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### **RATING AND CHARACTERISTIC CURVES (R4000 THRU R5000)**

FIG. 1 - TYPICAL FORWARD CURRNET DERATING CURVE

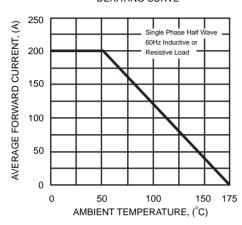


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

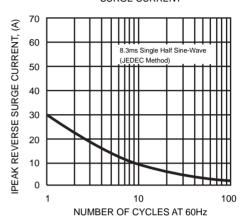
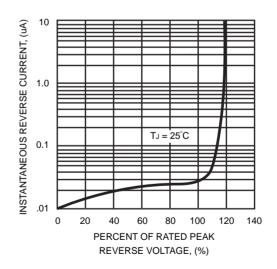


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



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