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*

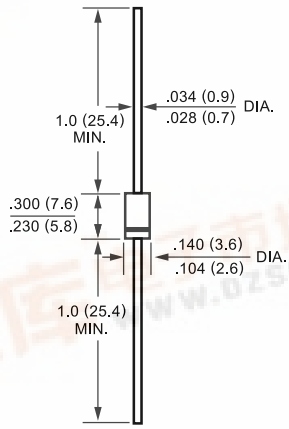
FEATURES

* 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

DO-15



Dimensions in inches and (millimeters)

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%.

		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	@T_A = 25°C	I_R	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

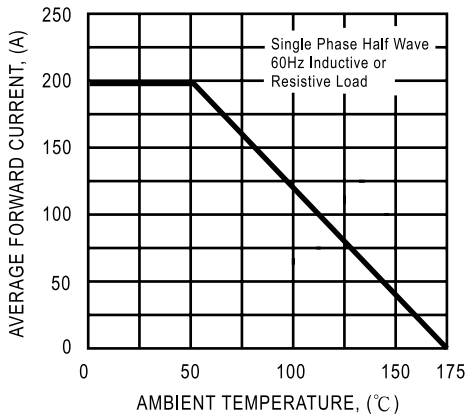


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

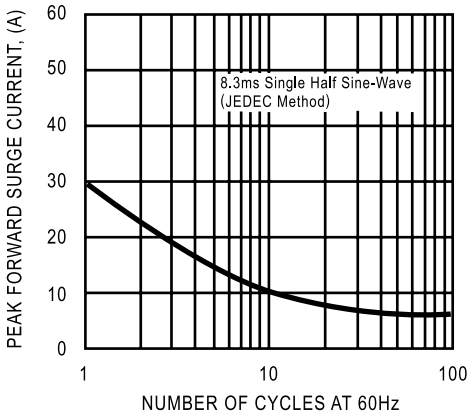


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS