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

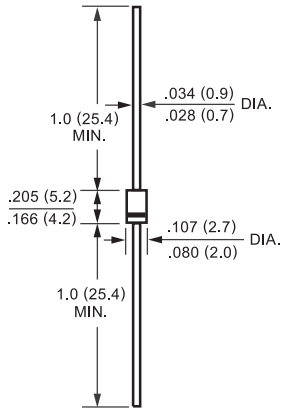
* Low cost
* Low leakage
* Low forward voltage drop
* High current capability

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



DO-41



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	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 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.

NEXT EXIT

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

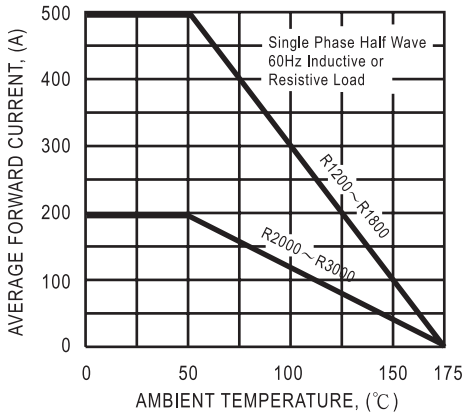


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

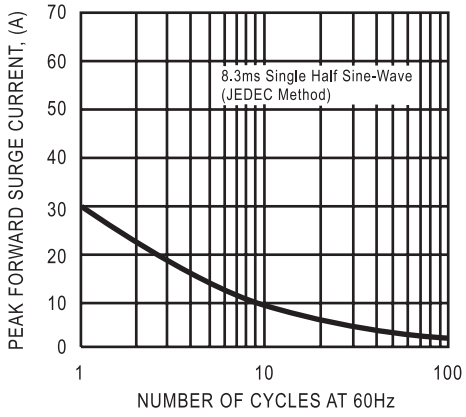


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

