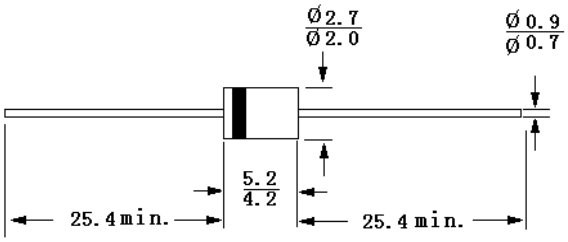
R1200 THRU R2000

HIGH VOLTAGE SILICON RECTIFIERS
Reverse Voltage – 1200 to 2000 Volts
Forward Current – 0.2 to 0.5 Ampere

DO-41



Dimensions in mm

Features

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

Mechanical Data

- **Case:** Molded plastic, DO-41
- **Mounting Position:** Any
- **Terminals:** Axial leads, solderable per MIL-STD-202

Absolute Maximum Ratings and Characteristics

Ratings at 25^{0}C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz. resistive or inductive load. For capacitive load, derate current by 20%.

		Symbols	R1200	R1500	R1800	R2000	Units
Maximum recurrent peak reverse voltage		V_{RRM}	1200	1500	1800	2000	Volts
Maximum RMS voltage		V_{RMS}	840	1050	1260	1400	Volts
Maximum DC blocking voltage		V_{DC}	1200	1500	1800	2000	Volts
Maximum average forward rectified current at T_A = 55℃		I_O	500			200	mAmps
Peak forward surge current, 8.3ms 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			3	Volts
Maximum DC reverse current at rated DC blocking voltage	@T_A = 25℃	I_R	5				µAmps
	@T_A = 100℃		100				
Maximum full load reverse current average, Full cycle 0.375" (9.5 mm) lead length at T_L = 75℃			30				µAmps
Typical junction capacitance (Note)		C_J	30				pF
Operating and storage temperature range		T_J ,T_{Stg}	-55 to +150				℃

Notes: Measured at 1MH$_Z$ and applied reverse voltage of 4volts.

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FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

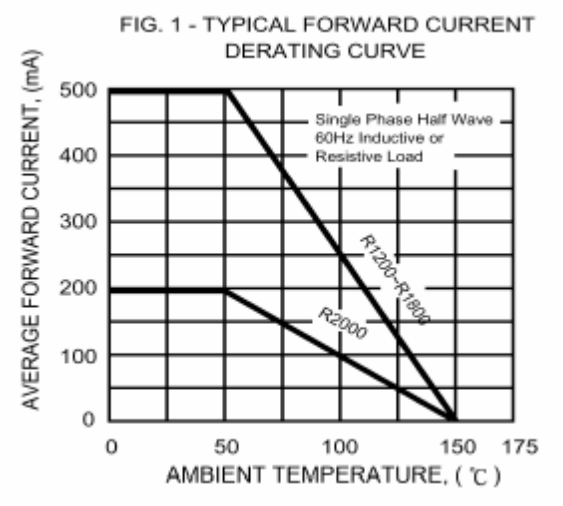

FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

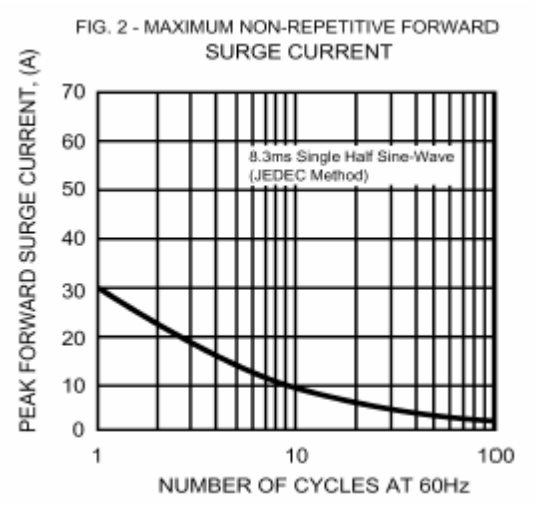

FIG. 3 - TYPICAL REVERSE CHARACTERISTICS