

R1200 THRU R2000

HIGH VOLTAGE SILICON RECTIFIERS

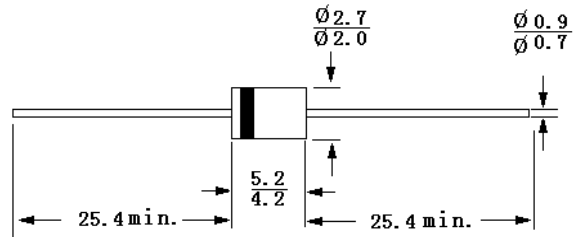
Reverse Voltage – 1200 to 2000 Volts

Forward Current – 0.2 to 0.5 Ampere

DO-41

Features

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



Dimensions in mm

Mechanical Data

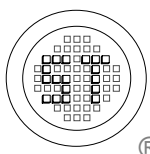
- **Case:** Molded plastic, DO-41
- **Mounting Position:** Any
- **Terminals:** Axial leads, solderable per MIL-STD-202

Absolute Maximum Ratings and Characteristics

Ratings at 25°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 $T_A = 55^\circ\text{C}$	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	@ $T_A = 25^\circ\text{C}$	5				μAmps
	@ $T_A = 100^\circ\text{C}$	100				
Maximum full load reverse current average, Full cycle 0.375" (9.5 mm) lead length at $T_L = 75^\circ\text{C}$		30				μAmps
Typical junction capacitance (Note)	C_J	30				pF
Operating and storage temperature range	T_J, T_S	-55 to +150				$^\circ\text{C}$

Notes: Measured at 1MHz and applied reverse voltage of 4volts.



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 550-159-04-02-04

Dated : 30/03/2005 H

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FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

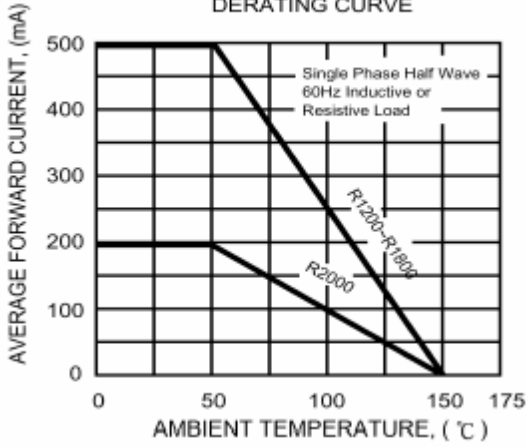


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

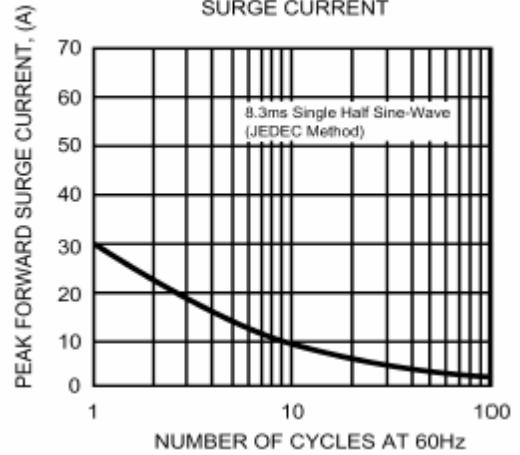
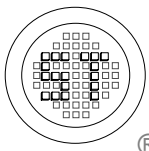
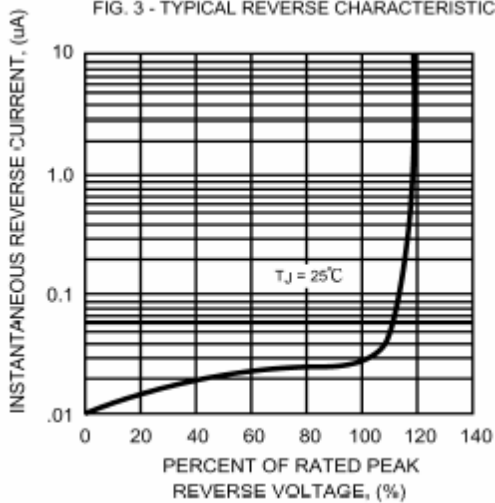


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



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