

R2500F THRU R3000F (DO-41)

HIGH VOLTAGE FAST RECOVERY RECTIFIERS

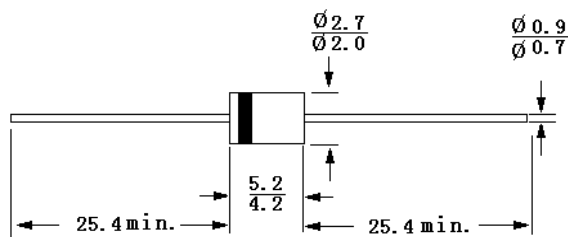
Reverse Voltage – 2500 to 3000 Volts

Forward Current – 0.2 Amperes

DO-41

Features

- Fast switching
- Low leakage
- High current capability
- High surge capability
- High reliability

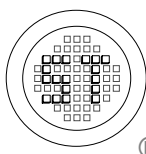


Absolute Maximum Ratings and Characteristics

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

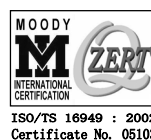
	Symbols	R2500F	R3000F	Units
Maximum recurrent peak reverse voltage	V _{RRM}	2500	3000	V
Maximum RMS voltage	V _{RMS}	1750	2100	V
Maximum DC blocking voltage	V _{DC}	2500	3000	V
Maximum forward voltage at 0.2 A	V _F	4.0	5.0	V
Maximum average forward rectified current .375"(9.5mm) lead length at T _A = 50°C	I _(AV)	0.2		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30		A
Maximum reverse current at T _A = 25°C at rated DC blocking voltage T _A = 100°C	I _R	5.0 100		μA
Maximum full load reverse current average, Full cycle 0.375"(9.5mm)lead length at T _L = 55°C		100		
Maximum reverse recovery time (Note 1)	T _{RR}	500		ns
Operating and storage temperature range	T _J , T _S	-55 to +150		°C

Notes: (1) Reverse recovery test conditions $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$.



SEMTECH ELECTRONICS LTD.

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Dated : 28/05/2005 H

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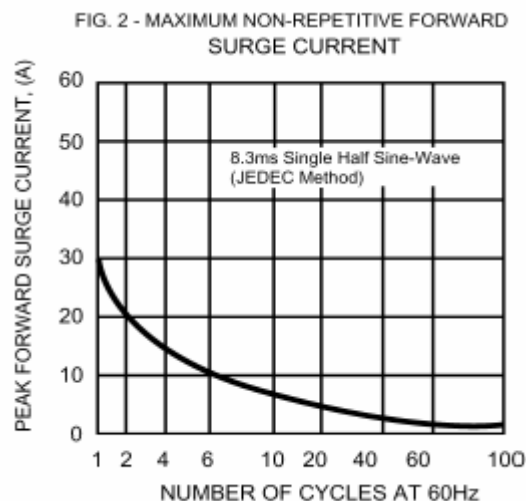
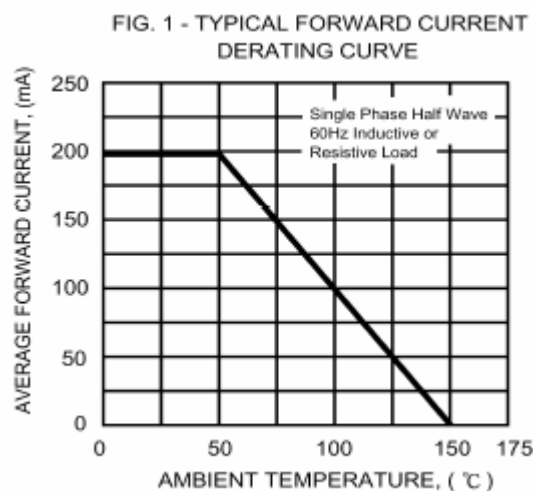
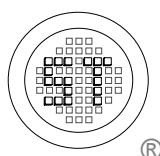
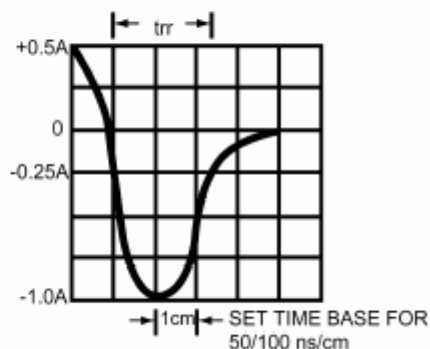
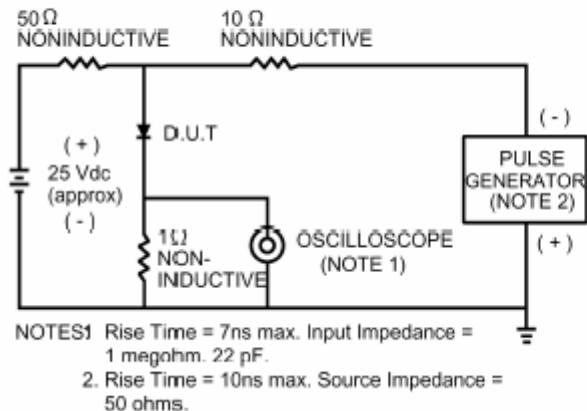
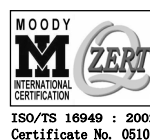


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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