

# R2500F THRU R3000F (DO-41)

## HIGH VOLTAGE FAST RECOVERY RECTIFIERS

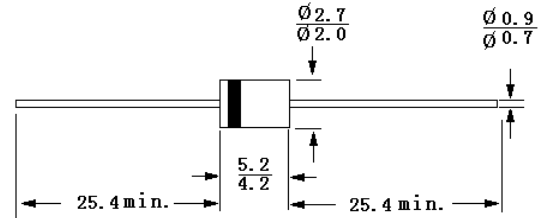
Reverse Voltage – 2500 to 3000 Volts

Forward Current – 0.2 Amperes

DO-41

### Features

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



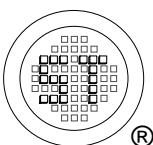
Dimensions in mm

### 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 $T_A = 50$	$I_{(AV)}$	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 $T_A = 25$ at rated DC blocking voltage $T_A = 100$	$I_R$	5.0		A
Maximum full load reverse current average, Full cycle 0.375"(9.5mm)lead length at $T_L = 55$		100		
Maximum reverse recovery time (Note 1)	$T_{RR}$	500		ns
Operating and storage temperature range	$T_J, T_{Stg}$	-55 to +150		

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



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Dated : 28/05/2005 H

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FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

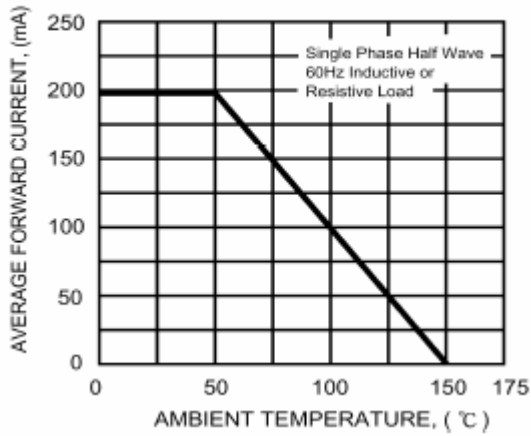


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

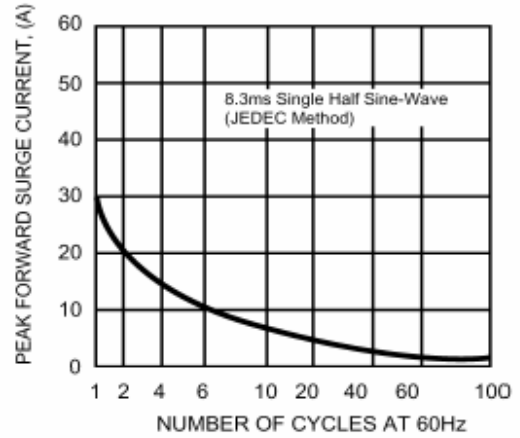
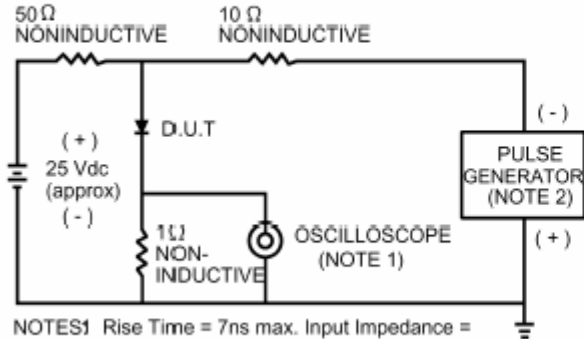
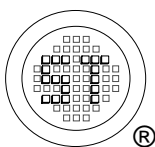
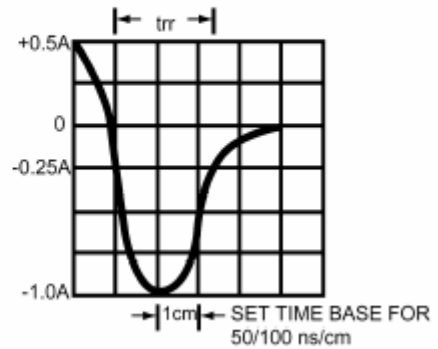


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.  
 2. Rise Time = 10ns max. Source Impedance = 50 ohms.



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