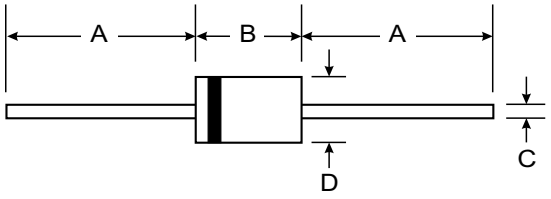
R2500F-R5000F

0.2A Axial Leaded High Voltage Rectifier

Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol,Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0



DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Mechanical Data

- Case:JEDEC DO--15,molded plastic
- Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- Polarity: Color band denotes cathode
- Weight: 0.014 ounces,0.39 grams
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

		R2500F	R3000F	R4000F	R5000F	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	2500	3000	4000	5000	V
Maximum RMS voltage	V_{RMS}	1750	2100	2800	3500	V
Maximum DC blocking voltage	V_{DC}	2500	3000	4000	5000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	0.2				A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0				A
Maximum instantaneous forw ard voltage @ 0.2A	V_F	4.0	5.0	6.5		V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0				μA
Maximum reverse recovery time (Note1)	t_{rr}	500				ns
Typical junction capacitance (Note2)	C_J	15				pF
Operating junction temperature range	T_J	- 55 ---- + 150				℃
Storage temperature range	T_{STG}	- 55 ---- + 150				℃

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Measured at 1.0MH_Z and applied reverse voltage of 4.0V DC.

FIG.1 – FORWARD DERATING CURVE

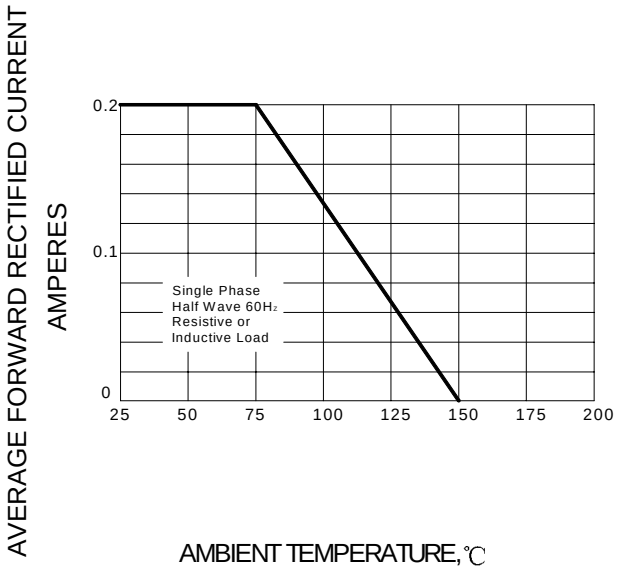


FIG.2 -- PEAK FORWARD SURGE CURRENT

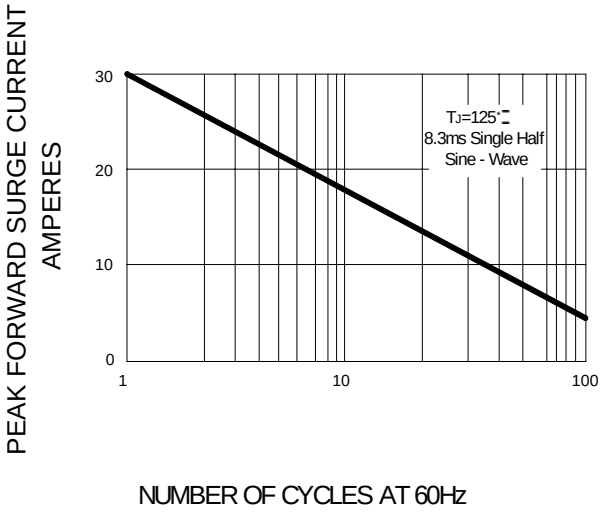
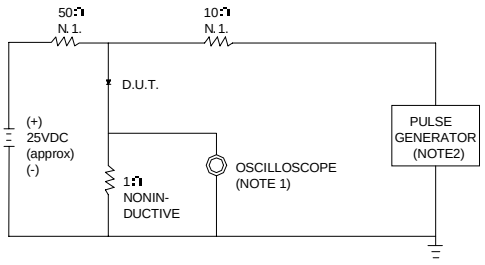
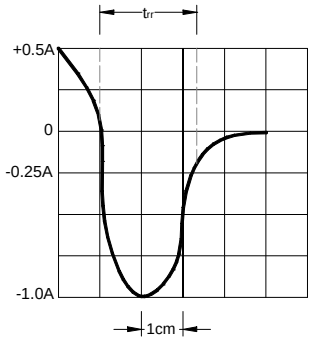


FIG.3 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1.RISE TIME = 7ns MAX.INPUT IMPEDANCE =1MΩ. 22pF.
2.RISE TIME =10ns MAX.SOURCE IMPEDANCE=50 Ω.



SET TIME BASE FOR 50/100 ns/cm