

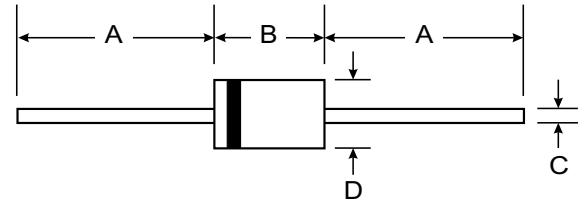
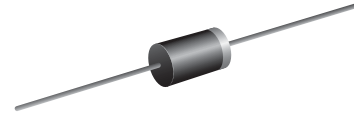
**VOLTAGE RANGE: 600 - 1000V**  
**CURRENT: 1.5 A**

### Features

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

### Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-0 rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



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		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

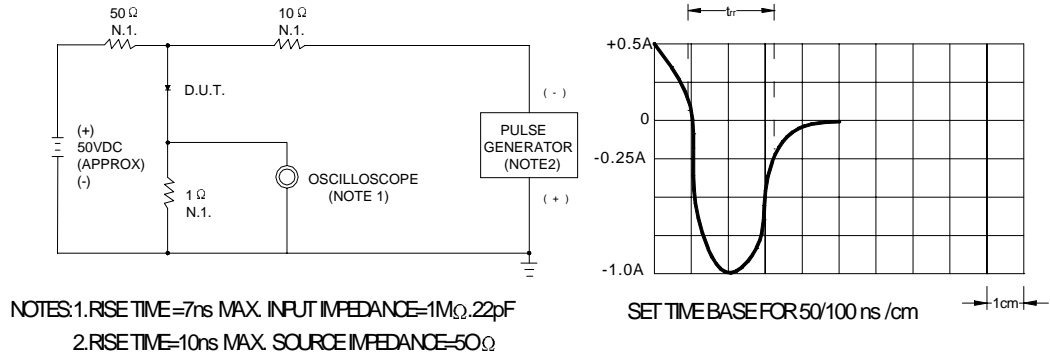
Characteristic	Symbol	TVR4J	TVR4N	Unit
Maximum recurrent peak reverse voltage	$V_{RRM}$	600	1000	V
Maximum RMS voltage	$V_{RMS}$	420	700	V
Maximum DC blocking voltage	$V_{DC}$	600	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.5		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	50.0		A
Maximum instantaneous forward voltage @ 1.5 A	$V_F$	1.3		V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0	100.0	$\mu\text{A}$
Maximum reverse recovery time (Note1)	$t_{rr}$	1000		ns
Typical junction capacitance (Note2)	$C_J$	20		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	40		$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55-----+150		$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55-----+150		$^\circ\text{C}$

NOTE:1. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$ .

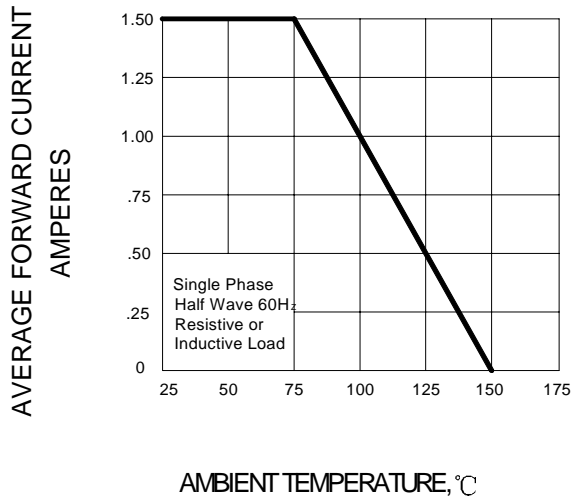
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

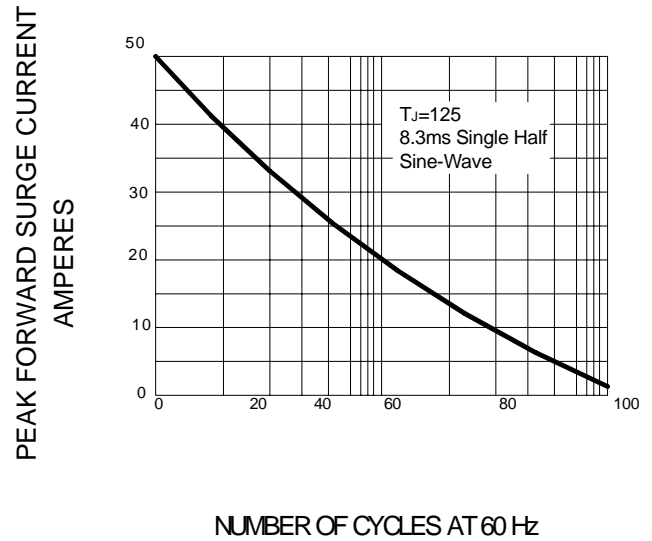
**FIG.1 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



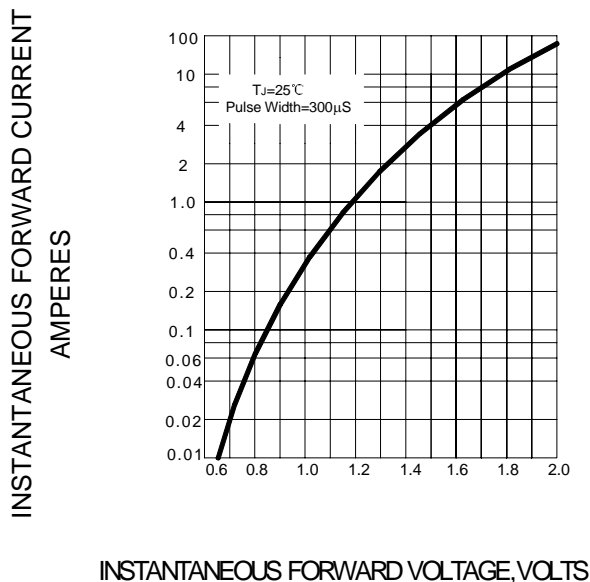
**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – PEAK FORWARD SURGE CURRENT**



**FIG.4 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.5 – TYPICAL JUNCTION CAPACITANCE**

