

**1.5 AMPS. SOFT RECOVERY RECTIFIERS**

**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
1.5 Amperes

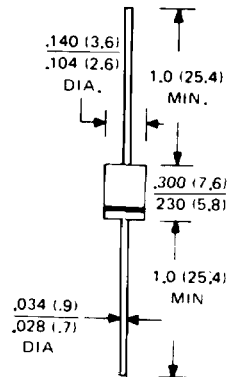
**FEATURES**

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

**MECHANICAL DATA**

Case: JEDEC DO-15 molded plastic  
 Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208  
 Polarity: Color band denotes cathode  
 Weight: 0.015 ounce, 0.4 grams  
 Mounting position: Any

**DO-15**



Dimensions in inches and (millimeters)

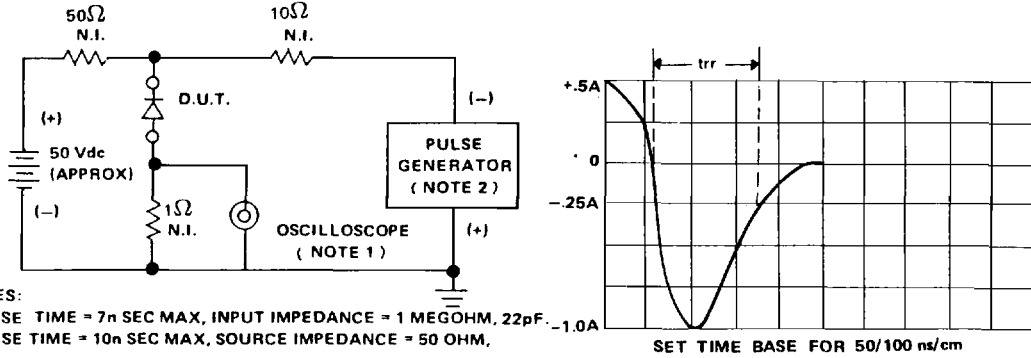
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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%.

		SR1501	SR1502	SR1503	SR1504	SR1505	SR1506	SR1507	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Lengths @ $T_A = 50^\circ C$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3 ms single half-sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Maximum Forward Voltage at 1.5A DC	$V_F$	1.2							V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	5 100							$\mu A$ $\mu A$
Maximum Reverse Recovery Time (Note 1)	$t_{RR}$	150			200		300		ns
Typical Junction Capacitance (Note 2)	$C_J$	15					8		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	40							$^\circ C/W$
Operating Temperature Range	$T_J$	-65 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-65 to +175							$^\circ C$

NOTES: 1. Measured with  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{rr} = 0.25A$   
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
 3. Thermal Resistance Junction to Ambient.

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES:

1. RISE TIME = 7n SEC MAX, INPUT IMPEDANCE = 1 MEGOHM, 22pF.
2. RISE TIME = 10n SEC MAX, SOURCE IMPEDANCE = 50 OHM,

FIG. 2 - FORWARD DERATING CURVE

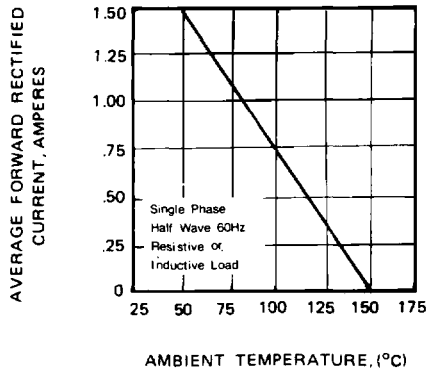


FIG. 3 PEAK FORWARD SURGE CURRENT

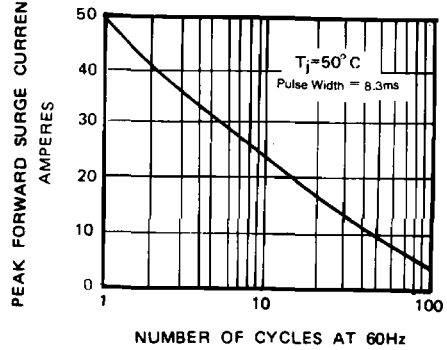


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

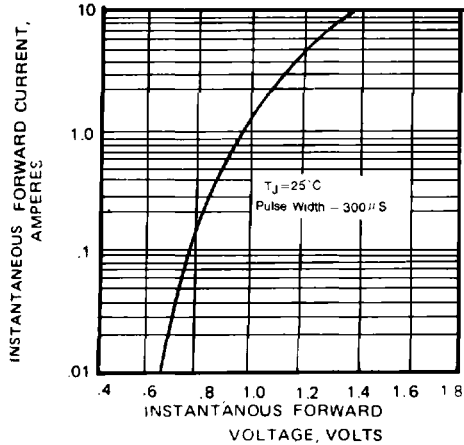


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

