



# TVR30

## HIGH VOLTAGE FAST RECOVERY SILICON DIODE FOR CRT APPLICATIONS TYPE - TVR30



This high voltage fast recovery diode was developed for assembly or encapsulation and is intended primarily for use as a building block in the assembly of high voltage circuits for black / white TV and similar service.

### ABSOLUTE MAXIMUM RATINGS

Peak Reverse Voltage - Repetitive	$V_{RWM}$ max.	30,000 Volts
* Average Forward Current	$I_{F(AV)}$ max.	10 mA
* Peak Forward Current - Repetitive	$I_{FRM}$ max.	200 mA
** Operating Temperature	$T_A$	+100 °C
Storage Temperature Range	$T_{STG}$	-55 °C to +150 °C

\*Pulse rectifier service -TV deflection system, duty cycle approximately 15% of one horizontal cycle. Approximately 10  $\mu$ sec at a repetition rate of 15,750 Hz

\*\*See Figure 2(over)

### ELECTRICAL CHARACTERISTICS (@ $T_A=25^\circ\text{C}$ , Unless Otherwise indicated.)

Forward Voltage $V_F @ I_F = 5 \text{ mA}$	45V max.
* Reverse Current $I_R @ V_R = 30\text{KV}$	1uA max.
* Reverse Current @ $T_A = 100^\circ\text{C}$ , $I_R @ V_R = 30\text{KV}$	10uA max.
Reverse Recovery time (Fig.3) $t_{rr}$	100 nanosec max.
Max. Surge Current	3A

\* Tested in suitable dielectric medium

EDI reserves the right to change these specifications at any time without notice.

# TVR 30

FIG.1 TYPICAL APPLIED VOLTAGE

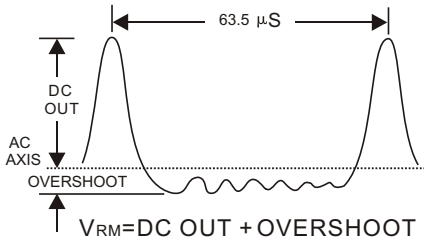


FIG.2 TYPICAL OPERATING CIRCUIT

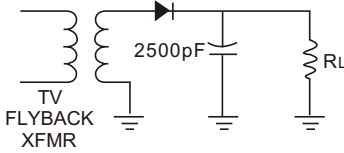
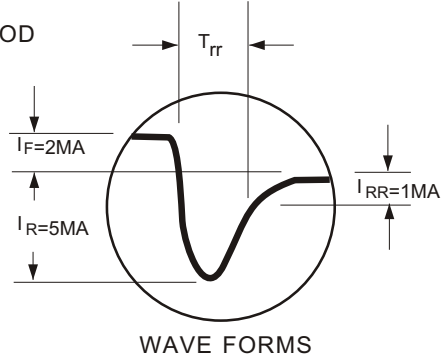
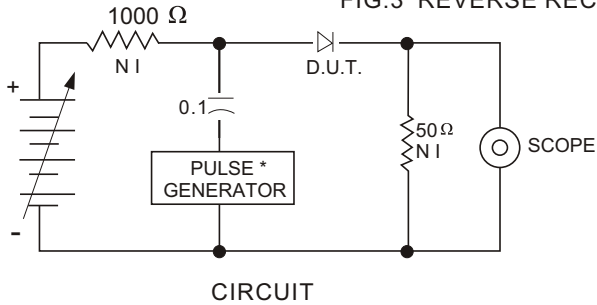
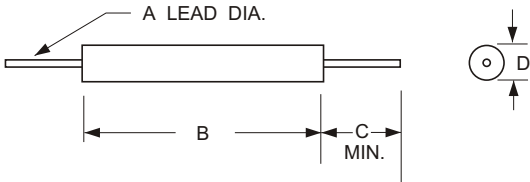


FIG.3 REVERSE RECOVERY TEST METHOD



\*PULSE GENERATOR  
 HP 214 A OR EQUIV.  
 PULSE WIDTH 1 μS  
 REP.RATE 10 HKZ

FIG.4 MECHANICAL OUTLINE



	INCHES	MM
A	.020	0.51
B	1.5	38.1
C	0.5	12.7
D	.235	5.97

- Notes:
- 1.molding material rated UL94V-0
  - 2.max.lead temperature for soldering, 1/8" from body, 10seconds @260°C

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