



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 μsec at a repetition rate of 15,750 Hz

**See Figure 2 (over)

ELECTRICAL CHARACTERISTICS (@ $T_A=25\text{ °C}$, 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 @ $T_A = 100\text{ °C}$, $I_R @ V_R = 30\text{KV}$	10uA max.
Reverse Recovery time (Fig.3) t_{rr}	100 nanosec max.
Max. Surge Current	3A

* Tested in suitable dielectric medium



TVR 30

FIG.1 TYPICAL APPLIED VOLTAGE

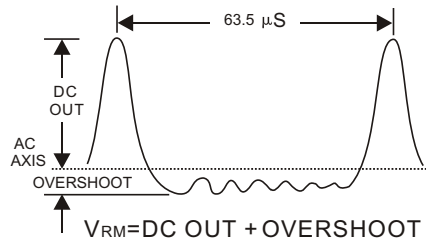


FIG.2 TYPICAL OPERATING CIRCUIT

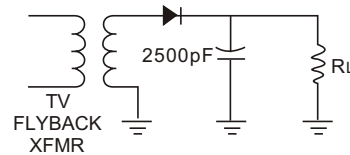
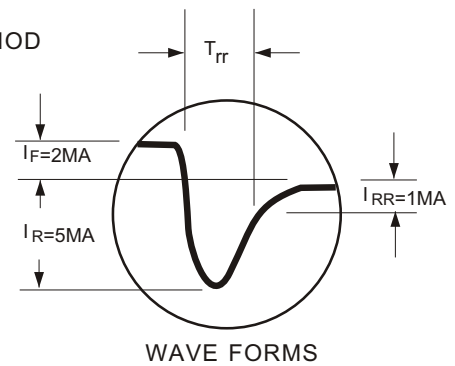
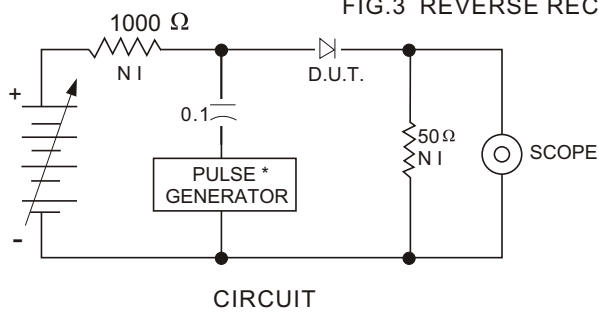
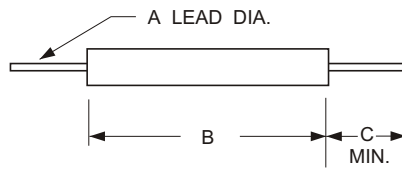


FIG.3 REVERSE RECOVERY TEST METHOD



*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, $\frac{1}{8}$ " from body, 10seconds @260°C

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