



HIGH VOLTAGE FAST RECOVERY
SILICON DIODE FOR CRT APPLICATIONS
TYPE - TVR20



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.	20,000 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 (@ $T_A=25$ °C, Unless Otherwise indicated.)

Forward Voltage V_F @ $I_F=5$ mA	30V max.
* Reverse Current I_R @ $V_R=20$ KV	1uA max.
* Reverse Current @ $T_A=100$ °C, I_R @ $V_R=20$ 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 -20

FIG.1 TYPICAL APPLIED VOLTAGE

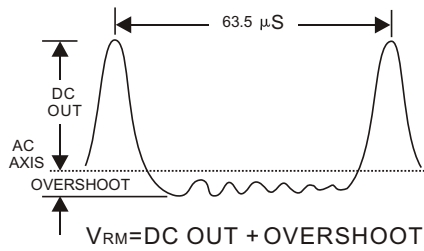


FIG.2 TYPICAL OPERATING CIRCUIT

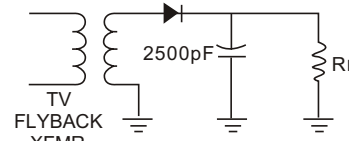
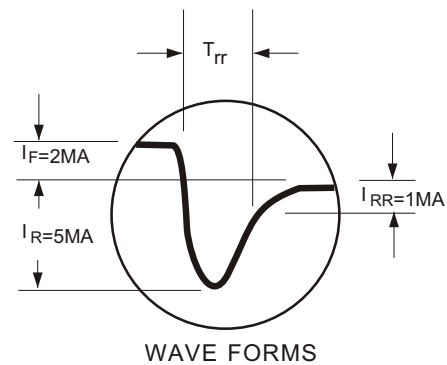
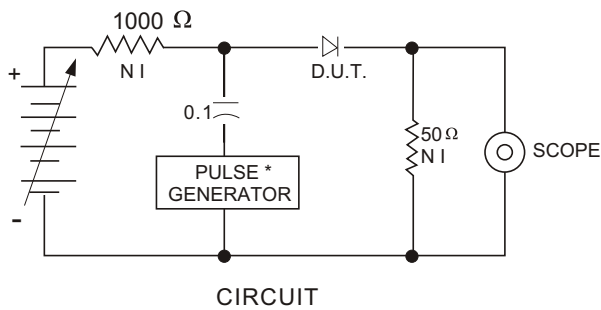
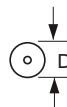
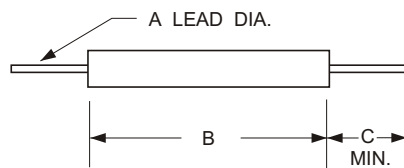


FIG.3 REVERSE RECOVERY TEST METHOD



*PULSE GENERATOR
HP 214 A OR EQUIV.
PULSE WIDTH 1 μ S
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	0.235	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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