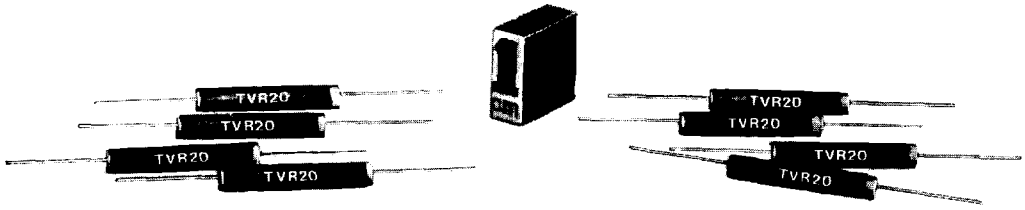
HIGH VOLTAGE FAST RECOVERY SILICON DIODE FOR CRT APPLICATIONS TYPE—TVR 20



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.	1.0 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 usec at a repitition rate of 15,750 Hz.
**See Figure 2 (over)

ELECTRICAL CHARACTERISTICS @ TA = 25°C, unless otherwise indicated.

Forward Voltage V_F @ I_F = 5mA	30V max.
*Reverse Current I_R @ V_R = 20KV	1 uA max.
*Reverse Current @ T_A = 100°C, I_R @ V_R = 20KV	10 uA max.
Reverse Recovery (Fig. 3) t_{rr}	100 nanosec max.

*Tested in suitable dielectric medium

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

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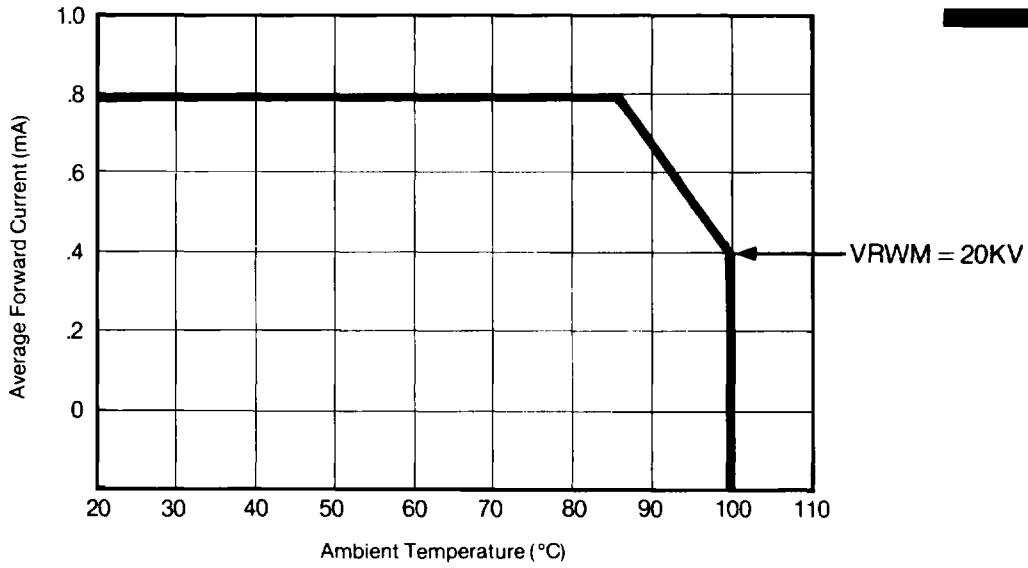


FIG. 1 Maximum Average Forward Current vs. Ambient Temperature (°C)

FIG. 2 TYPICAL APPLIED VOLTAGE

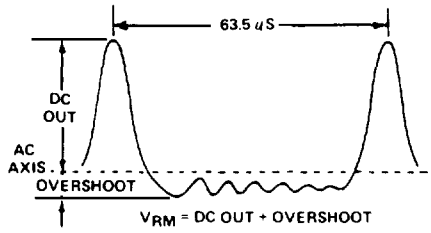


FIG. 3 TYPICAL OPERATING CIRCUIT

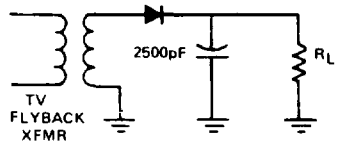
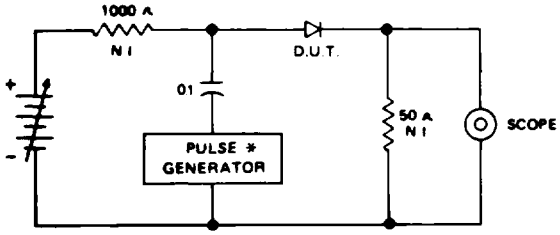
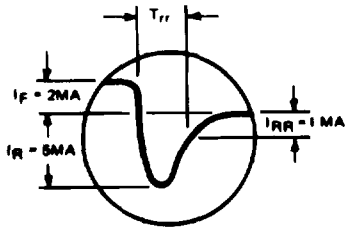


FIG. 4 REVERSE RECOVERY TEST METHOD



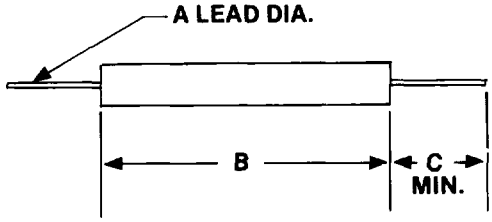
CIRCUIT

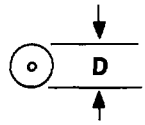


WAVEFORMS

FIG. 5 MECHANICAL OUTLINE

*PULSE GENERATOR
HP 214 A OR EQUIV.
PULSE WIDTH 1/4 S
REP. RATE 10 HKZ





	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, 10 seconds @ 260° C.