



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.

FIG.1 TYPICAL APPLIED VOLTAGE

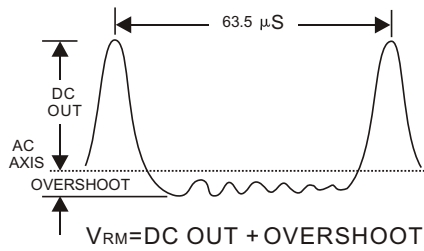


FIG.2 TYPICAL OPERATING CIRCUIT

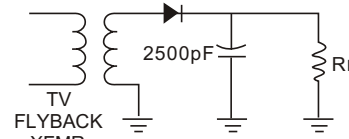
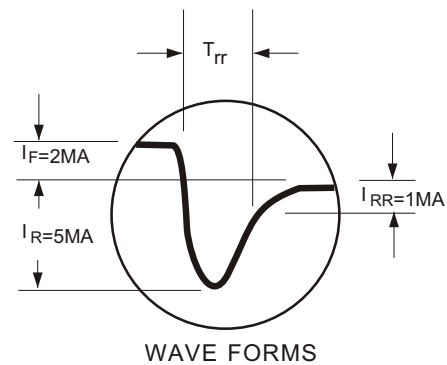
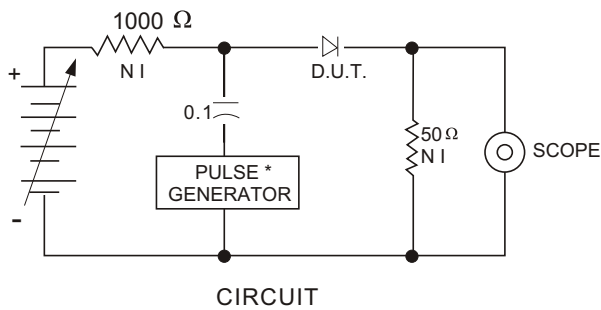
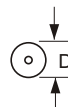
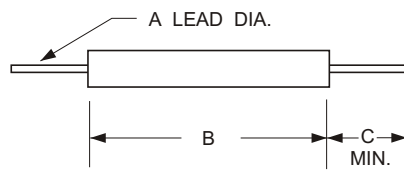


FIG.3 REVERSE RECOVERY TEST METHOD



*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

ELECTRONIC DEVICES, INC. DESIGNERS AND MANUFACTURERS OF SOLID STATE DEVICES SINCE 1951.

21 GRAY OAKS AVENUE * YONKERS, NEW YORK 10710 914-965-4400 * FAX 914-965-5531 * 1-800-678-0828

e-mail:sales@ediododes.com * website:http:// www.ediododes.com