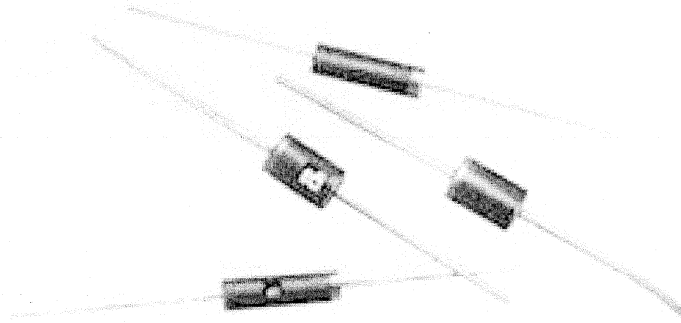




HIGH VOLTAGE RECOVERY
FOR X-RAY AND
INDUSTRIAL APPLICATIONS
STANDARD AND FAST RECOVERY TYPES

- EPOXY MOLDED PACKAGE
- PLATINUM DOPED
- AVALANCHE CAPABILITY



X-RAY BOARD ASSEMBLIES ALSO AVAILABLE. INQUIRE.

ELECTRICAL CHARACTERISTICS (at TA=25°C Unless Otherwise Specified)

Type	XMR 5	XMR 10	XMR 15	XMU 5	XMU 10	
Peak Reverse Voltage, Operating, $V_{R(OPER)}$	5	10	15	5	9	kV
Peak Reverse Voltage, Test, $V_{R(TEST)}$	5.5	11	16.5	5.5	10	kV
Average Rectified Forward Current in 55 °C Oil (Fig. 1)	500	300				mA
Max. Peak Surge Current, I_{FRM} 1/2 Cycles @ 60Hz (Non Repetitive), Fig. 2	100					AMPS
Max. Peak Surge Current, I_{FRM} , 10 Cycles @ 60Hz	25					AMPS
Max. Forward Voltage Drop, $V_{FM}@ I_F$	$I_F=500$ mA	$I_F=300$ mA				V
	10	17	21	11	21	
Max. DC Reverse Current, I_{RM} , @ $V_{R(TEST)}$ and 25 °C,	5					µA
Max. DC Reverse Current, I_{RM} , @ $V_{R(TEST)}$ and 100 °C,	500	300				µA
Max. Reverse Recovery Time, T_{RR} $I_F=50$ mA, $I_R=100$ mA, $I_{RR}=25$ mA, (Fig.4)	150	135		75		ns
Ambient Operating Temperature Range, T_A	-55 to +125°C					
Storage Temperature Range, T_{STG}	-55 to +150°C					

If operated over 10,000 v/inch in length, devices should be immersed in oil or re-encapsulated.

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

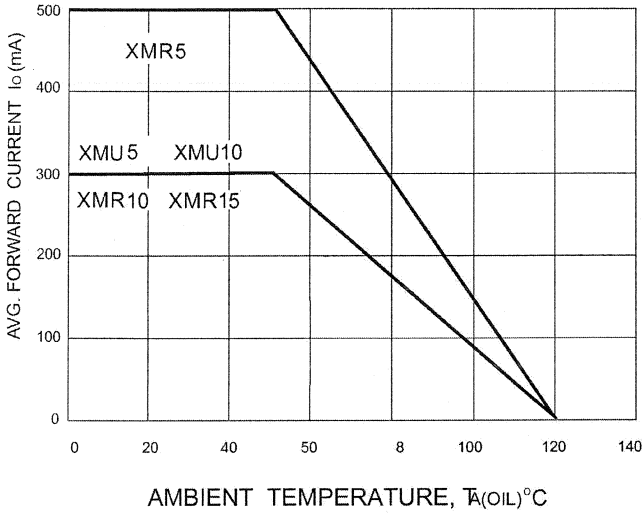


FIG.2
NON-REPETITIVE SURGE CURRENT
PEAK SURGE CURRENT VS
NUMBER OF CYCLES AT 60 Hz
(SINE WAVE INPUT) AND $T_A = 25^\circ C$

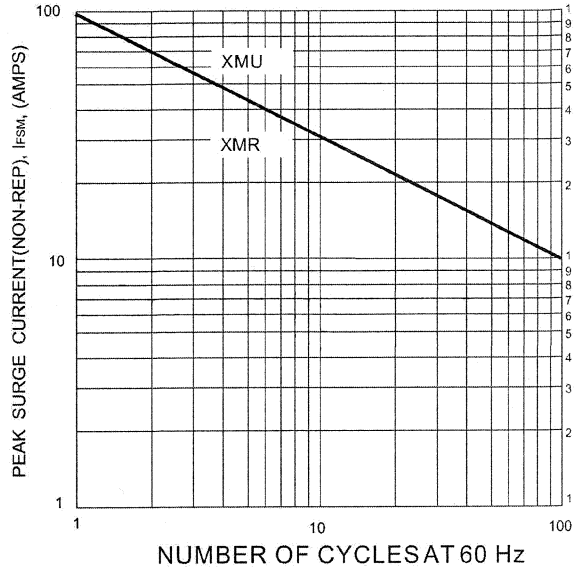


FIG.3
MECHANICAL

Max. lead temperature for soldering, $1/8"$ from body, 10 seconds @ $260^\circ C$

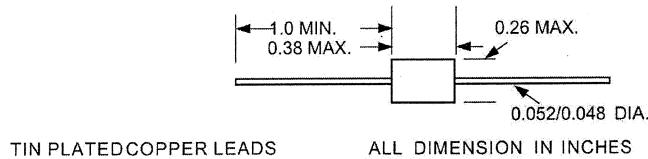
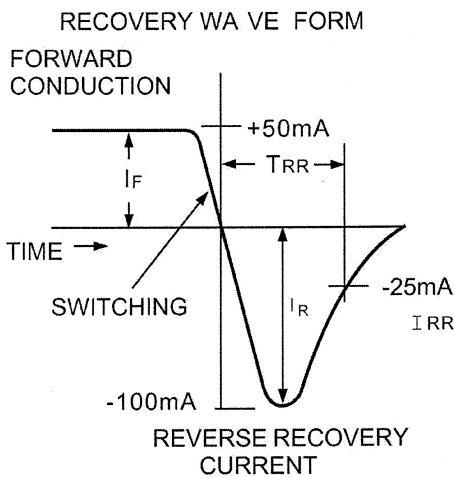
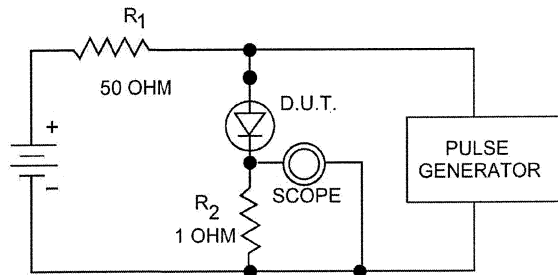


FIG.4
REVERSE RECOVERY TEST METHOD



RECOVERY TEST CIRCUIT



R_1, R_2 NON-INDUCTIVE RESISTORS
PULSE GENERATOR-HEWLETT PACKARD 214A OR EQUIV.
1 KC REP. RATE, 10μ SEC. PULSE WIDTH
ADJUST PULSE AMPLITUDE FOR PEAK I_R

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

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