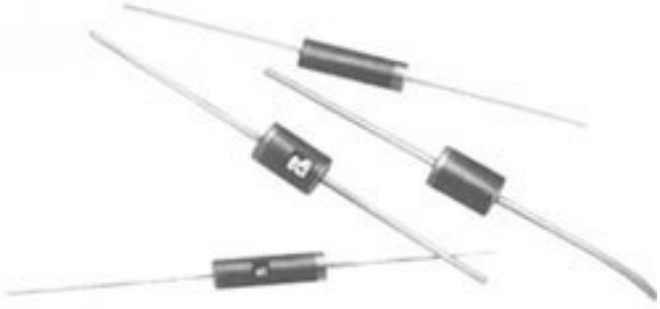
XL XLR XLU XMR XMU

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 A VAILABLE. INQUIRE.



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

Type	XLR 5	XL 10	XLR 10	XLU 12	XLR 20	XMR 5	XMU 5	XMU 10	
Peak Reverse Voltage, Operating, $V_{R(OPER)}$	5	9	9	11	18	5	5	9	kV
Peak Reverse Voltage, Test, $V_{R(TEST)}$	5.5	10	10	12	20	5.5	5.5	10	kV
Average Rectified Forward Current in 55 °C Oil (Fig. 1)	200	220	200	100	100	500	300	300	mA
Max. Peak Surge Current, I_{FRM} ½ Cycles @ 60Hz (Non Repetitive), Fig. 2	35	20	18	15	10	100	100	100	AMPS
Max. Peak Surge Current, I_{FRM}, 10 Cycles @ 60Hz	11	6	5.5	5	2.7	25	25	25	AMPS
Max. Forward Voltage Drop, V_{FM} @ , I_F	I_F=50mA					I_F=500mA	I_F=300mA		
	7	12	14	22	28	10	11	21	V
Max. DC Reverse Current, I_{RM} , @ $V_{R(TEST)}$ and 25 °C,	1	1	1	1	1	5	5	5	µA
Max. DC Reverse Current, I_{RM} , @ $V_{R(TEST)}$ and 100 °C,	30	25	30	30	30	500	350	350	µA
Max. Reverse Recovery Time, T_{RR} I_F=50mA, I_R=100mA, I_{RR}=25mA, (Fig.4)	175	NOT RATED	175	50	175	150	75	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

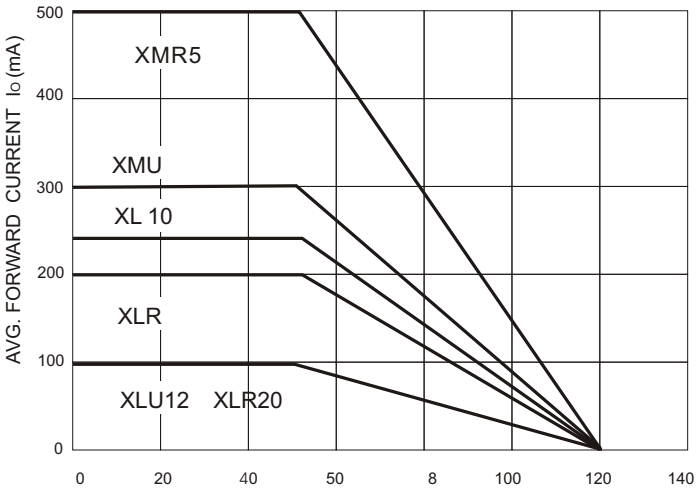


FIG.2

NON- REPETITIVE SURGE CURRENT

PEAK SURGE CURRENT VS
NUMBER OF CYCLES AT 60 Hz
(SINE WA VE INPUT)AND T A=25 °C

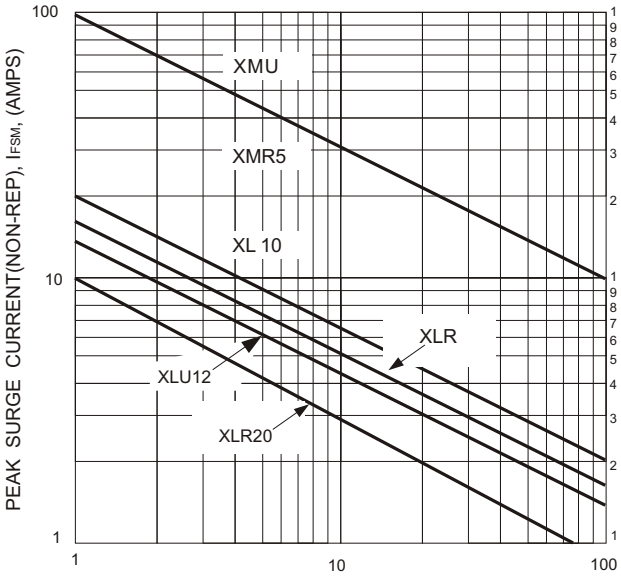
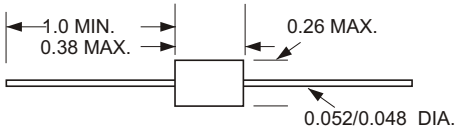


FIG.3

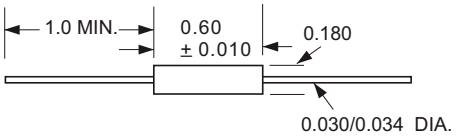
MECHANICAL

Max.lead temperature for soldering, 1/8" from body ,10 seconds @260 °C



TIN PLATED COPPER LEADS

XMR,XMU



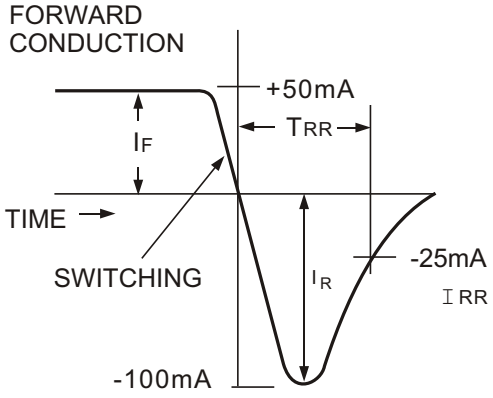
ALL DIMENSION IN INCHES

XL,XLR,XLU

FIG.4

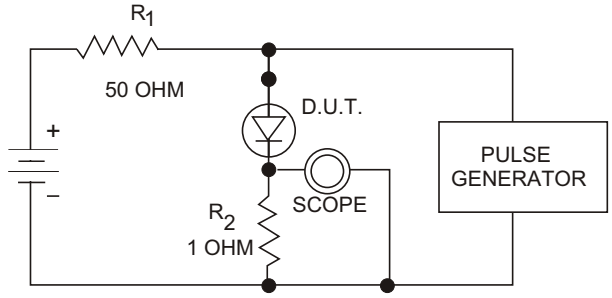
REVERSE RECOVERY TEST METHOD

RECOVERY WA VE FORM



REVERSE RECOVERY
CURRENT

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

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