KVF

500 mA SILICON RECTIFIERS
HIGH VOLTAGE

- DIFFUSED SILICON JUNCTIONS
- PRV 5,000 TO 30,000 VOLTS
- AVALANCHE CHARACTERISTICS
- LOW LEAKAGE

EDI Type No.	Peak Reverse Voltage PRV (Volts)	Max. Fwd. Voltage Drop at 25 °C and 500 mA V_F (Volts)	Length " L" FIG. 3 Inches	MM
KVF 5	5,000	6	1.00	25.40
KVF 7.5	7,500	9	1.63	41.40
KVF 10	10,000	12	2.00	50.80
KVF 12.5	12,500	15	2.50	63.50
KVF 15	15,000	17	2.50	63.50
KVF 20	20,000	22	3.20	81.28
KVF 25	25,000	28	4.50	114.30
KVF 30	30,000	34	4.50	114.30

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

Max. DC Reverse Current @ PRV and 25 °C, I_R	0.1 μA
Max. DC Reverse Current @ PRV and 100 °C, I_R	15 μA
Ambient Operating Temperature Range, T_A	-55 °C to +175°C
Storage Temperature Range, T_{STG}	-55 °C to +175°C
Max. One-Half Cycle Surge Current, I_{FM} (Surge)@ 60Hz	50 Amps
Forward Voltage Repetitive Peak, I_{FRM}	2 Amps
Max. Reverse Recovery Time , T_{rr} (Fig.4)	5 μsec

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

FIG.1
OUTPUT CURRENT vs AMBIENT TEMPERATURE

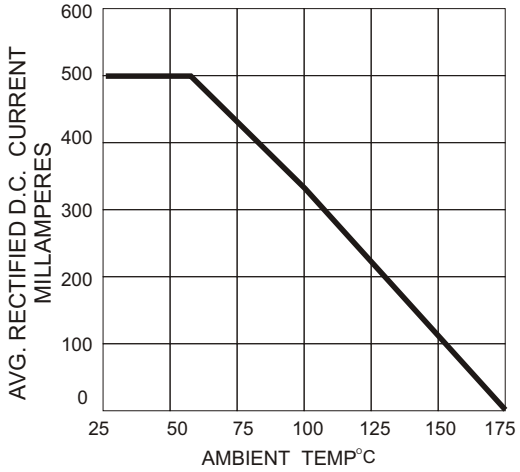


FIG.2
NON-REPETITIVE SURGE CURRENT RATINGS

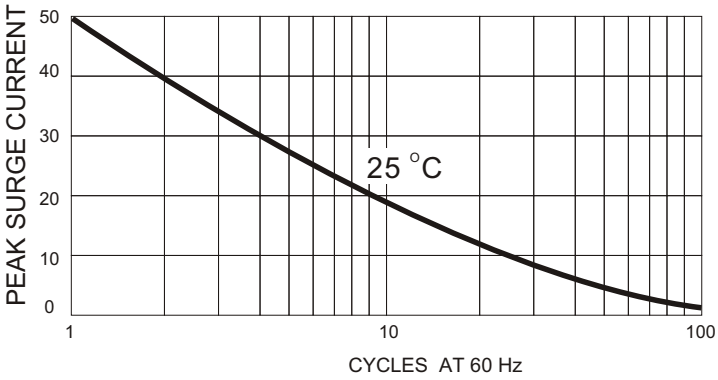
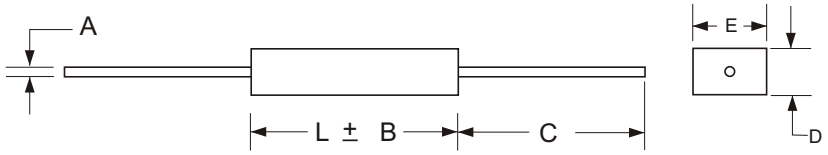


FIG.3
PACKAGE STYLE

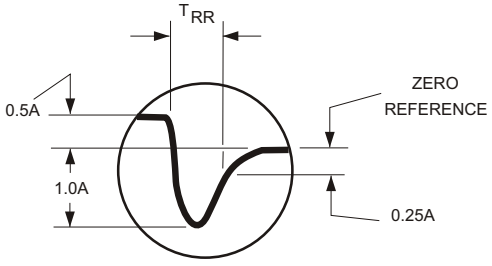


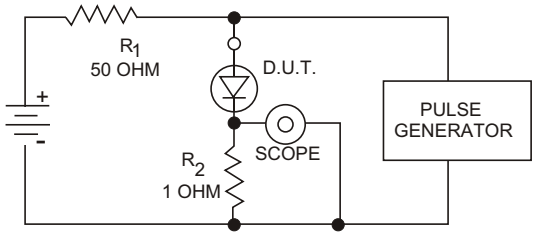
LTR	INCHES	MILLIMETERS
A	.051″ DIA.	1.30 DIA.
B	± .03″	± .76
C	2.0″ MIN.	50.8 MIN.
D	0.31 ″MAX.	7.9 MAX.
E	0.51 ″MAX.	12.96 MAX.

It is recommended that a proper heat sink be used on the terminals of this device between the body and the soldering point to prevent damage form excess heat.

FIG.4
TEST CIRCUIT

TYPICAL REVERSE RECOVERY WAVEFORM





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

Prior to the manufacture of these assemblies, the individual silicon junction is measured for maximum recovery time in the test circuit shown.

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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@edidiodes.com * website: http://www.edidiodes.com