KVP RVP

KILOVOLT RECTIFIER ASSEMBLIES

- MATCHED SILICON RECTIFIER ELEMENTS
- RATED CURRENT TO 1.0 AMPERES
- PRV 5,000 TO 50,000 VOLTS
- FAST RECOVERY (RVP SERIES)
- ALL APPLICABLE MIL-STD-750 TESTS
- HIGH THERMAL CONDUCTIVITY ENCAPSULATION

EDI Type No.	Peak Reverse Voltage PRV (Volts)	Avg. Fwd. Current I_O at 25°C (Amps)	Max. Fwd Voltage Drop at 25°C and 1A. V_F (Volts)	Dimension "L" Inches Fig.3	Dimension "C" Inches Fig.3
STANDARD RECOVERY					
KVP5	5,000	1.00	8	2.5	1/4
KVP6	6,000	1.00	9	2.5	
KVP7	7,000	1.00	10	3.0	
KVP8	8,000	1.00	11	3.0	
KVP9	9,000	1.00	14	3.0	
KVP10	10,000	1.00	15	3.5	3/8
KVP15	15,000	1.00	21	5.0	1/4
KVP20	20,000	.75	26	5.5	
KVP25	25,000	.75	32	6.0	1/2
KVP30	30,000	.75	39	6.0	
KVP35	35,000	.75	46	6.5	
KVP40	40,000	.75	53	6.5	
KVP50	50,000	.75	65	7.0	
200 NANOSECOND RECOVERY (FIG.4)					
RVP5	5,000	.90	10	2.5	1/4
RVP6	6,000	.90	11	2.5	
RVP7	7,000	.90	12	3.0	
RVP8	8,000	.90	13	3.0	
RVP9	9,000	.90	16	3.0	
RVP10	10,000	.90	17	3.5	3/8
RVP15	15,000	.90	25	5.0	1/4
RVP20	20,000	.70	30	5.5	
RVP25	25,000	.70	36	6.0	1/2
RVP30	30,000	.70	43	6.0	
RVP35	35,000	.70	50	6.5	
RVP40	40,000	.70	58	6.5	
RVP50	50,000	.70	72	7.0	

ELECTRICAL CHARACTERISTICS (at T_A=25°C Unless Otherwise Specified)	KVP SERIES STANDARD RECOVERY
Max. DC Reverse Current @ PRV and 25°C, I_R	5 μA
Max. DC Reverse Current @ PRV and 100°C, I_R	100 μA
Ambient Operating Temperature Range, T_A	-55°C to +150°C
Storage Temperature Range, T_{STG}	-55°C to +150°C
Max. One-Half Cycle Surge Current, I_{FM} (Surge) @ 60Hz	50 Amps
Forward Current Repetitive Peak, I_{FRM}	10 Amps

ELECTRICAL CHARACTERISTICS (at T_A=25°C Unless Otherwise Specified)	RVP SERIES FAST RECOVERY
Max. DC Reverse Current @ PRV and 25°C, I_R	5 μA
Max. DC Reverse Current @ PRV and 100°C, I_R	250 μA
Max. Reverse Recovery Time, T_{rr} (Fig.4)	300 nanosec
Ambient Operating Temperature Range, T_A	-55°C to +150°C
Storage Temperature Range, T_{STG}	-55°C to +150°C
Max. One-Half Cycle Surge Current, I_{FM} (Surge) @ 60Hz	30 Amps
Forward Current Repetitive Peak, I_{FRM}	8 Amps

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

FIG.1
OUTPUT CURRENT vs AMBIENT TEMPERATURE

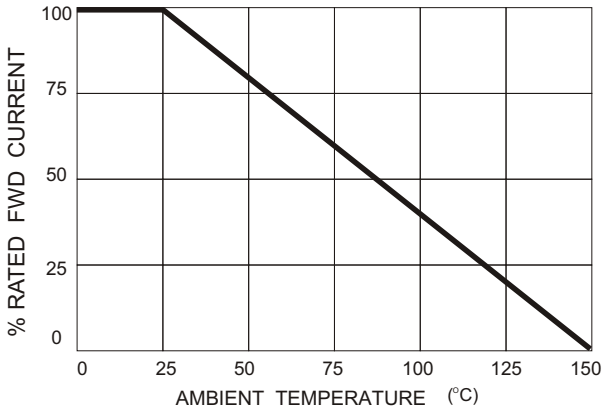


FIG.2
NON-REPETITIVE SURGE CURRENT RATINGS

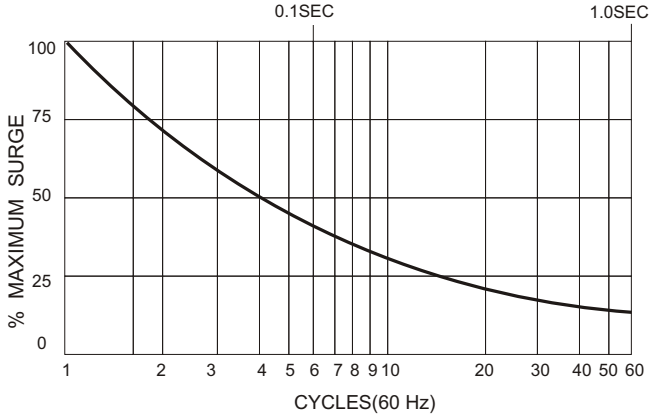
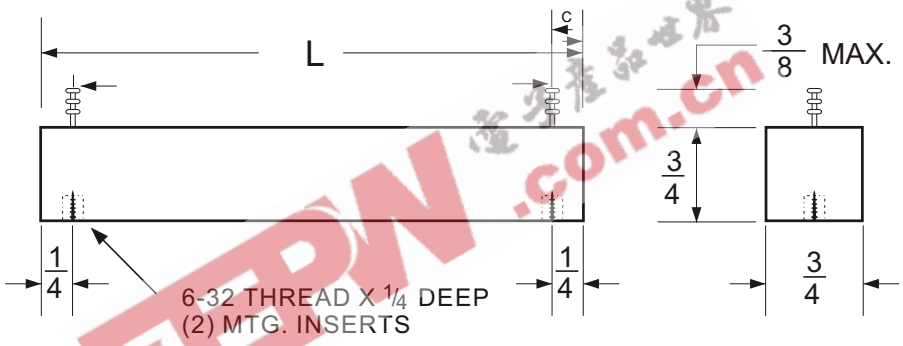


FIG.3
CASE STYLE A

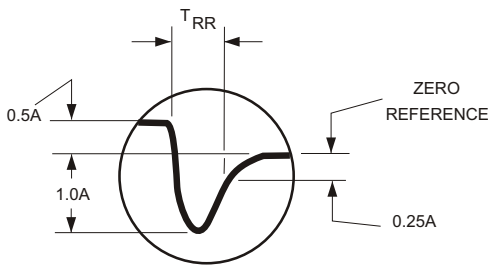


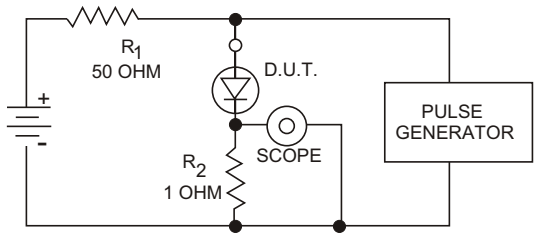
(ALL DIMENSIONS IN INCHES)

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.

TEST CIRCUIT
FIG.4

TYPICAL REVERSE RECOVERY WAVEFORM





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

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