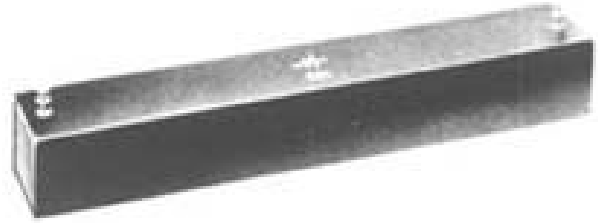




KVP RVP

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



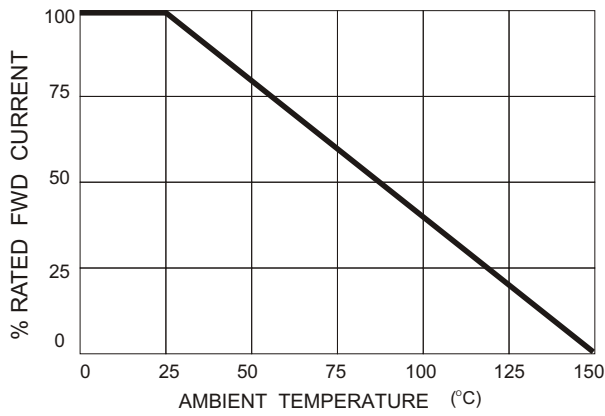
EDI Type No.	Peak Reverse Voltage PRV (Volts)	Avg. Fwd. Current $I_o$ at 25°C (Amps)	Max. Fwd Voltage Drop at 25°C and 1A. $V_F$ (Volts)	Dimension "L" Inches Fig.3	Dimension "C" Inches Fig.3
<b>STANDARD RECOVERY</b>					
KVP5	5,000	1.00	8	2.5	1/4
KVP6	6,000	1.00	9	2.5	
KVP7	7,000	1.00	10	3.0	
KVP8	8,000	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	
<b>200 NANOSECOND RECOVERY (FIG.4)</b>					
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 $T_A=25^\circ\text{C}$ Unless Otherwise Specified)	KVP SERIES STANDARD RECOVERY
Max. DC Reverse Current @ PRV and 25°C, $I_R$	5 $\mu\text{A}$
Max. DC Reverse Current @ PRV and 100°C, $I_R$	100 $\mu\text{A}$
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

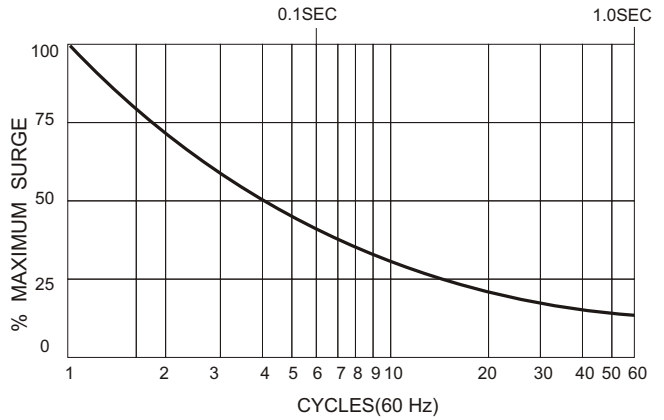
ELECTRICAL CHARACTERISTICS (at $T_A=25^\circ\text{C}$ Unless Otherwise Specified)	RVP SERIES FAST RECOVERY
Max. DC Reverse Current @ PRV and 25°C, $I_R$	5 $\mu\text{A}$
Max. DC Reverse Current @ PRV and 100°C, $I_R$	250 $\mu\text{A}$
Max. Reverse Recovery Time, $T_{rr}$ (Fig.4)	300 nanosec
Ambient Operating 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.

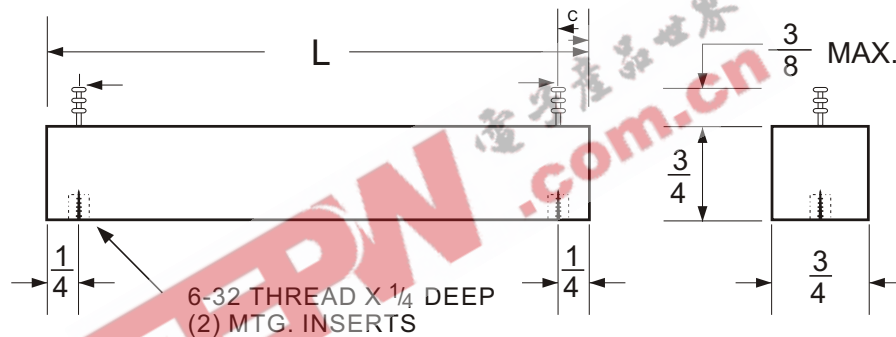
**FIG.1**  
OUTPUT CURRENT vs AMBIENT TEMPERATURE



**FIG.2**  
NON-REPETITIVE SURGE CURRENT RATINGS



**FIG.3**  
CASE STYLE A

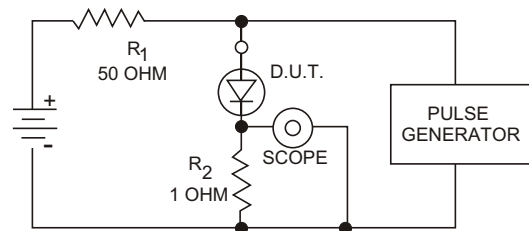
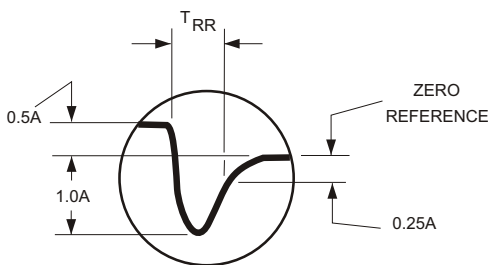


(ALL DIMENSIONS IN INCHES)

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 from excess heat.

**TEST CIRCUIT**  
**FIG.4**

TYPICAL REVERSE RECOVERY WAVEFORM



$R_1, R_2$  NON-INDUCTIVE RESISTORS  
PULSE GENERATOR - HEWLETT PACKARD 214A OR EQUIV.  
1KC REP.RATE, 10  $\mu$ 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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