



RVF

**FAST RECOVERY - HIGH VOLTAGE  
HIGH CURRENT SILICON RECTIFIERS**

- MATCHED SILICON RECTIFIER ELEMENTS
- DIFFUSED SILICON JUNCTIONS
- PRV 5,000 TO 40,000 VOLTS
- AVALANCHE CHARACTERISTICS
- LOW LEAKAGE



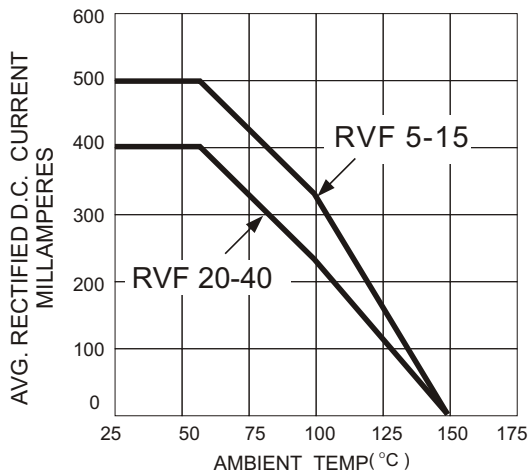
EDI Type No.	Peak Reverse Voltage PRV (V olts)	Average Rectified Current @55 °C@100 °C Amps		Max. Fwd Voltage @25 °C I <sub>F</sub> =0.5 ADC (Volts)	Length "L" Fig.3	
					Inches	MM
RVF5	5,000	0.50	0.33	9	1.25	31.75
RVF8	8,000	0.50	0.33	12	1.75	44.45
RVF10	10,000	0.50	0.33	15	2.00	50.80
RVF12.5	12,500	0.50	0.33	20	2.50	63.50
RVF15	15,000	0.50	0.33	23	3.00	76.20
RVF20	20,000	0.40	0.27	30	4.00	101.60
RVF25	25,000	0.40	0.27	38	4.50	114.30
RVF30	30,000	0.40	0.27	45	5.50	139.70
RVF40	40,000	0.40	0.27	60	7.00	177.80

**ELECTRICAL CHARACTERISTICS(at T<sub>A</sub> =25 °C Unless Otherwise Specified)**

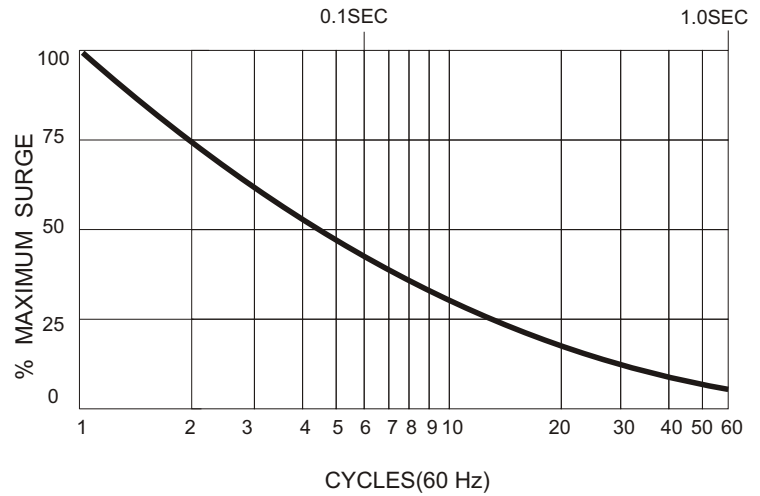
Max. DC Reverse Current @ PRV and 25 °C, I <sub>R</sub>	0.1 μA
Max. DC Reverse Current @ PRV and 100 °C, I <sub>R</sub>	15 μA
Ambient Operating Temperature Range, T <sub>A</sub>	-55 °C to +150 °C
Storage Temperature Range, T <sub>STG</sub>	-55 °C to +150 °C
Max. One-Half Cycle Surge Current, I <sub>FM</sub> (Surge) @ 60Hz	50 Amps
Forward Voltage Repetitive Peak, I <sub>FRM</sub>	2 Amps
Max. Reverse Recovery Time, T <sub>rr</sub> (Fig.4)	150 nanoseconds

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

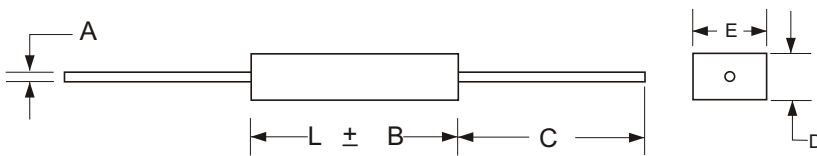
**FIG.1**  
OUTPUT CURRENT vs AMBIENT TEMPERATURE



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



**FIG.3**  
PACKAGE STYLE

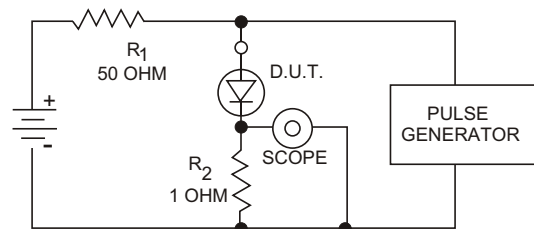
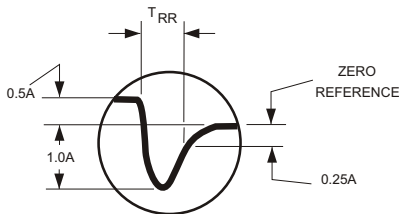


LTR	INCHES	MILLIMETERS
A	.051 "DIA.	1.30 DIA.
B	± .03"	± .76
C	2.0 "MIN.	50.8 MIN.
D	0.31 "MAX.	7.9 MAX.
E	0.76 "MAX.	19.30 MAX.

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 from 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, 10 $\mu$ SEC. 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.