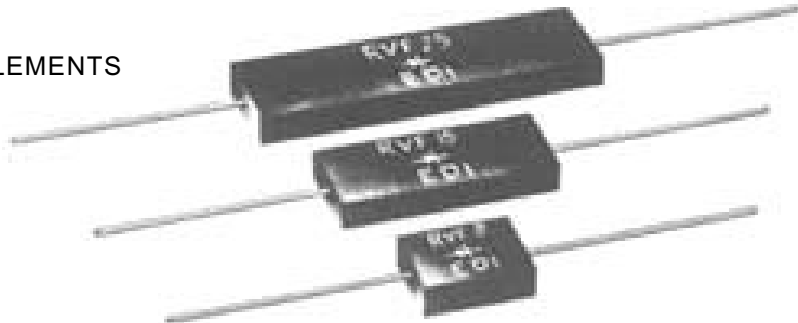




RVF

**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



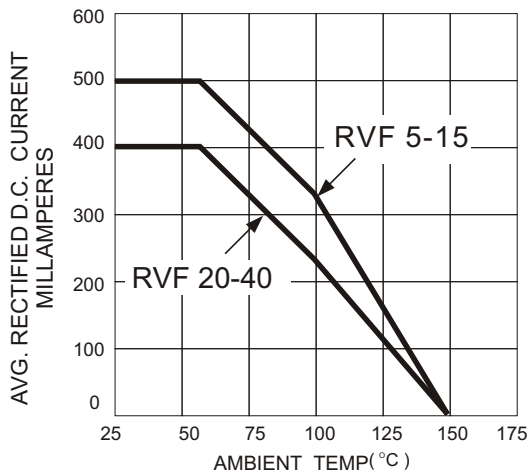
| EDI Type No. | Peak Reverse Voltage PRV (V olts) | Average Rectified Current @55 °C@100 °C Amps |      | Max. Fwd Voltage @25 °C I <sub>F</sub> =0.5 ADC (Volts) | Length "L" Fig.3 |        |
|--------------|-----------------------------------|--|------|---|------------------|--------|
|              |                                   |  |      |   | 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)**

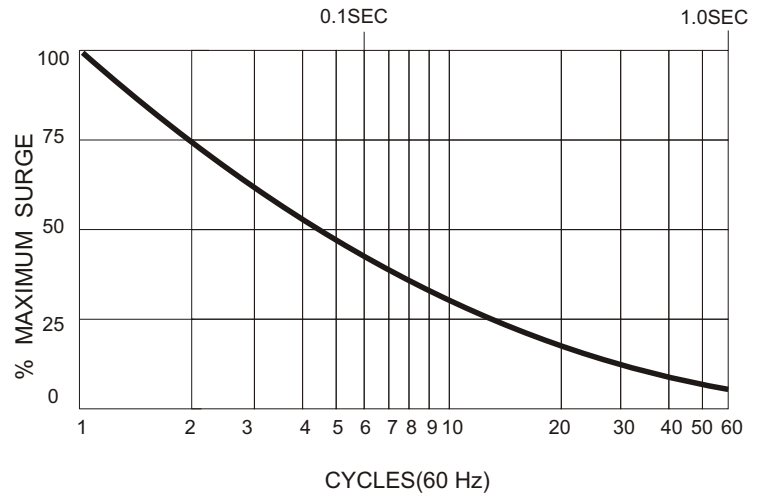
|   |                   |
|---|-------------------|
| Max. DC Reverse Current @ PRV and 25 °C, I <sub>R</sub>           | 0.1 μA            |
| Max. DC Reverse Current @ PRV and 100 °C, I <sub>R</sub>          | 15 μA             |
| Ambient Operating Temperature Range, T <sub>A</sub>               | -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.

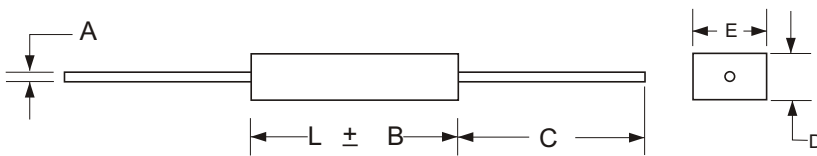
**FIG.1**  
OUTPUT CURRENT vs AMBIENT TEMPERATURE



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



**FIG.3**  
PACKAGE STYLE

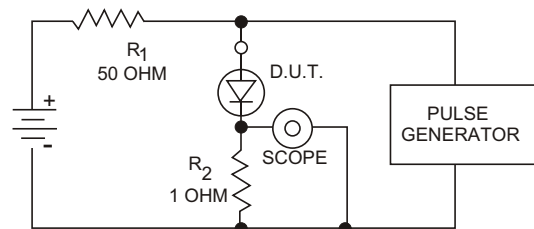
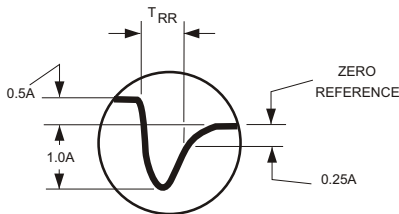


| LTR | INCHES     | MILLIMETERS |
|-----|------------|-------------|
| A   | .051" DIA. | 1.30 DIA.   |
| B   | ± .03"     | ± .76       |
| C   | 2.0" MIN.  | 50.8 MIN.   |
| D   | 0.31" MAX. | 7.9 MAX.    |
| E   | 0.76" MAX. | 19.30 MAX.  |

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.