



HIGH VOLTAGE HIGH CURRENT MINIATURE RECTIFIERS

- SMALL SIZE MOLDED PACKAGES
- PRV 1,000 TO 12,000 VOLTS
- FAST RECOVERY(R\_ SERIES)
- AVALANCHE CHARACTERISTICS



| EDI Type No.                   | Peak Reverse Voltage PRV(Volts) | Avg.Fwd.Current $I_o$ at 50°C (mA) FIG.1 | Max.Fwd Voltage Drop at 25°C and $I_o$ $V_F$ (Volts) | Max. Peak Surge Current, $I_{FSM}$ (8.3 ms) (Amps) FIG.2 | Repetitive Peak Forward Current $I_{FRM}$ (Amps) |
|--------------------------------|---------------------------------|--|--|--|--|
| STANDARD RECOVERY              |                                 |  |  |  |  |
| EF100                          | 1,000                           | 600                                      | 2.0  | 35   | 8.0  |
| EF150                          | 1,500                           | 600                                      | 2.0  | 35   | 8.0  |
| EF200                          | 2,000                           | 600                                      | 2.0  | 35   | 8.0  |
| EG200                          | 2,000                           | 400                                      | 3.0  | 30   | 6.0  |
| EG250                          | 2,500                           | 400                                      | 3.0  | 30   | 6.0  |
| EG300                          | 3,000                           | 400                                      | 3.0  | 30   | 6.0  |
| EH300                          | 3,000                           | 300                                      | 4.0  | 25   | 5.0  |
| EH350                          | 3,500                           | 300                                      | 4.0  | 25   | 5.0  |
| EH400                          | 4,000                           | 300                                      | 4.0  | 25   | 5.0  |
| EK450                          | 4,500                           | 200                                      | 6.0  | 15   | 3.0  |
| EK500                          | 5,000                           | 200                                      | 6.0  | 15   | 3.0  |
| EK600                          | 6,000                           | 200                                      | 6.0  | 15   | 3.0  |
| EM700                          | 7,000                           | 175                                      | 8.0  | 12   | 2.5  |
| EM800                          | 8,000                           | 175                                      | 8.0  | 12   | 2.5  |
| EP900                          | 9,000                           | 150                                      | 10.0   | 10   | 2.0  |
| EP1000                         | 10,000                          | 150                                      | 10.0   | 10   | 2.0  |
| ER1100                         | 11,000                          | 100                                      | 12.0   | 8  | 1.5  |
| ER1200                         | 12,000                          | 100                                      | 12.0   | 8  | 1.5  |
| 250 NANOSECOND RECOVERY(FIG.4) |                                 |  |  |  |  |
| RF160B                         | 1,600                           | 500                                      | 2.6  | 25   | 8.0  |
| RF200B                         | 2,000                           | 500                                      | 2.6  | 25   | 8.0  |
| RG300B                         | 3,000                           | 350                                      | 3.9  | 20   | 6.0  |
| RK300B                         | 3,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK400B                         | 4,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK500B                         | 5,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK600B                         | 6,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RM700B                         | 7,000                           | 125                                      | 10.4   | 8  | 2.0  |
| RM800B                         | 8,000                           | 125                                      | 10.4   | 8  | 2.0  |
| RP900B                         | 9,000                           | 100                                      | 13.0   | 7  | 1.5  |
| RP1000B                        | 10,000                          | 100                                      | 13.0   | 7  | 1.5  |
| RR1100B                        | 11,000                          | 80                                       | 15.6   | 6  | 1.0  |
| RR1200B                        | 12,000                          | 80                                       | 15.6   | 6  | 1.0  |
| 150 NANOSECOND RECOVERY(FIG.4) |                                 |  |  |  |  |
| RF160A                         | 1,600                           | 500                                      | 2.6  | 25   | 8.0  |
| RF200A                         | 2,000                           | 500                                      | 2.6  | 25   | 8.0  |
| RG300A                         | 3,000                           | 350                                      | 3.9  | 20   | 6.0  |
| RK300A                         | 3,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK400A                         | 4,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK500A                         | 5,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RK600A                         | 6,000                           | 150                                      | 7.8  | 10   | 3.0  |
| RM800A                         | 8,000                           | 125                                      | 10.4   | 8  | 2.0  |
| RP1000A                        | 10,000                          | 100                                      | 13.0   | 7  | 1.5  |
| <b>RR1200A</b>                 | <b>12,000</b>                   | <b>80</b>                                | <b>15.6</b>  | <b>6</b>   | <b>1.0</b>                                       |

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

# EF to RR

## ELECTRICAL CHARACTERISTICS (at $T_A = 25^\circ\text{C}$ Unless Otherwise Specified)

|   |   |
|---|---|
| Max. DC Reverse Current @ PRV and $25^\circ\text{C}$ , $I_R$  | 2 $\mu\text{A}$                             |
| Max. DC Reverse Current @ PRV and $100^\circ\text{C}$ , $I_R$ | 50 $\mu\text{A}$                            |
| Ambient Operating Temperature Range, $T_A$                    | $-55^\circ\text{C}$ to $+150^\circ\text{C}$ |
| Storage Temperature Range, $T_{STG}$                          | $-55^\circ\text{C}$ to $+150^\circ\text{C}$ |

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

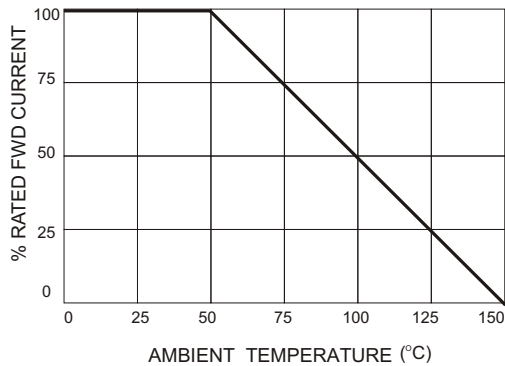


FIG.2

NON-REPETITIVE SURGE CURRENT

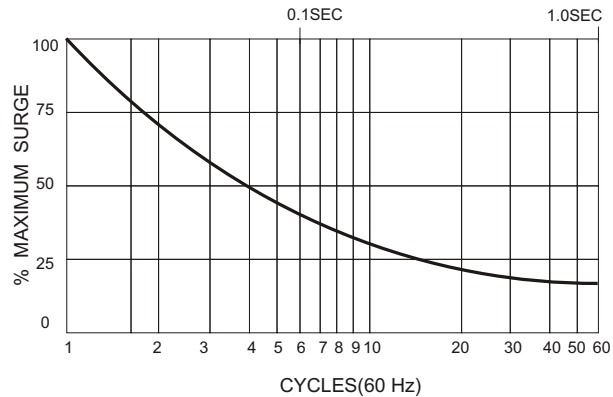
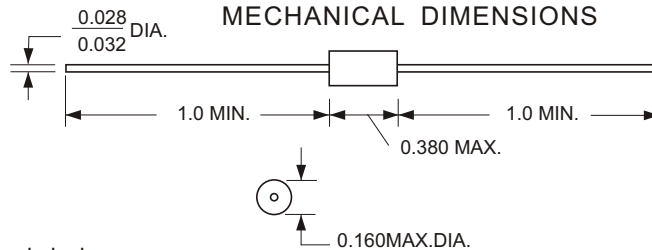


FIG.3

MECHANICAL DIMENSIONS



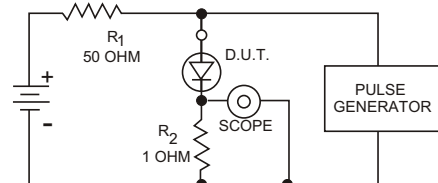
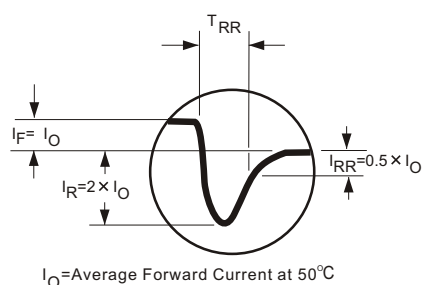
All dimensions in inches

Maximum lead and terminal temperature for soldering, 3/8 inch form case, 5 seconds at  $250^\circ\text{C}$

FIG.4

TEST CIRCUIT

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  $I_R$

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