



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 |
| RR1200A | 12,000 | 80 | 15.6 | 6 | 1.0 |

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

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

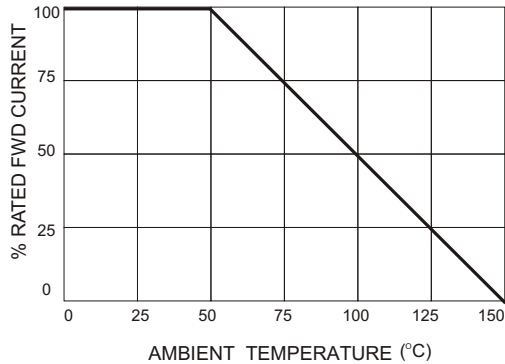


FIG.2

NON-REPETITIVE SURGE CURRENT

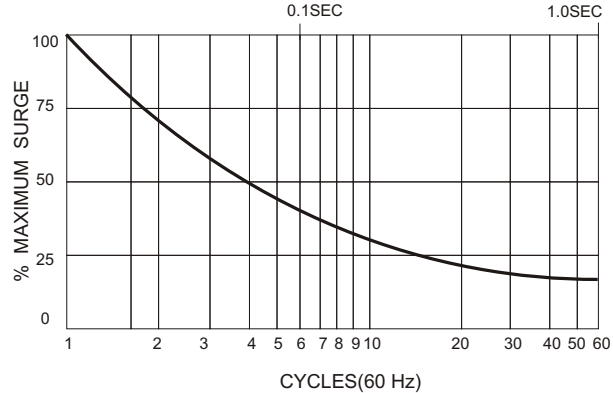
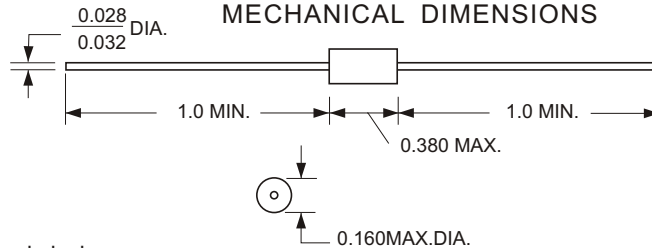


FIG.3

MECHANICAL DIMENSIONS



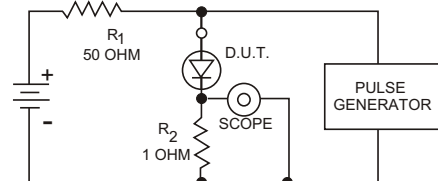
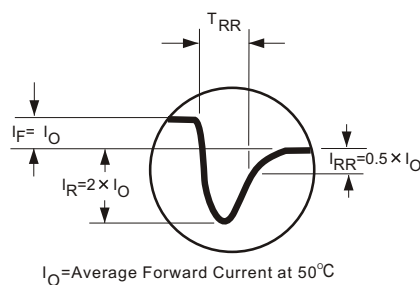
All dimensions in inches

Maximum lead and terminal temperature for soldering, 3/8 inch form case, 5 seconds at 250°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, 10μ 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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