



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 <sub>o</sub> at 50°C (mA) FIG.1	Max.Fwd Voltage Drop at 25°C and I <sub>o</sub> V <sub>F</sub> (Volts)	Max. Peak Surge Current, I <sub>FSM</sub> (8.3 ms) (Amps) FIG.2	Repetitive Peak Forward Current I <sub>FRM</sub> (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

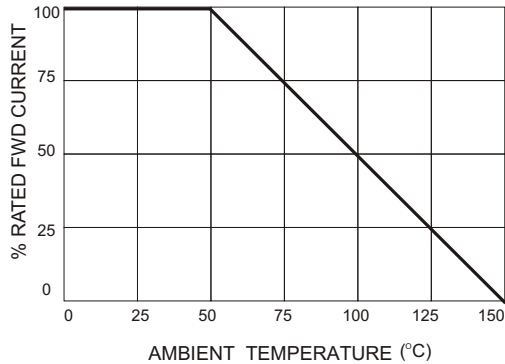


FIG.2

NON-REPETITIVE SURGE CURRENT

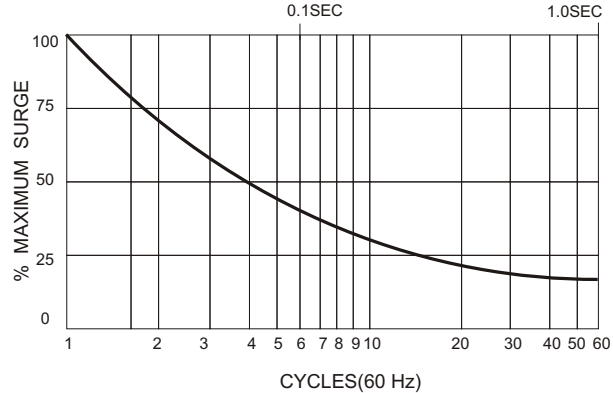
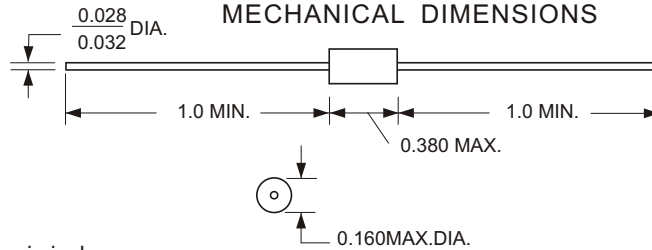


FIG.3

MECHANICAL DIMENSIONS



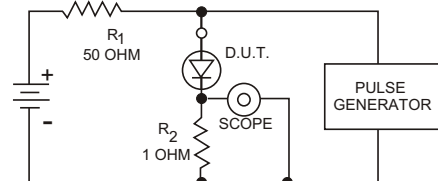
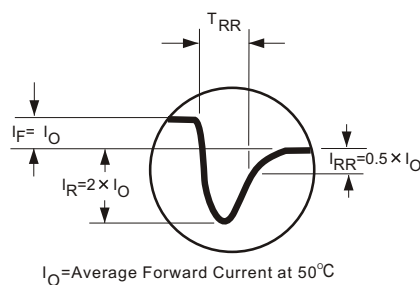
All dimensions in inches

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  $I_R$

**ELECTRONIC DEVICES, INC.** DESIGNERS AND MANUFACTURERS OF SOLID STATE DEVICES SINCE 1951.

21 GRAY OAKS AVENUE \* YONKERS, NEW YORK 10710 914-965-4400 \* FAX 914-965-5531 \* 1-800-678-0828

e-mail:sales@ediodes.com \* website: <http://www.ediodes.com>