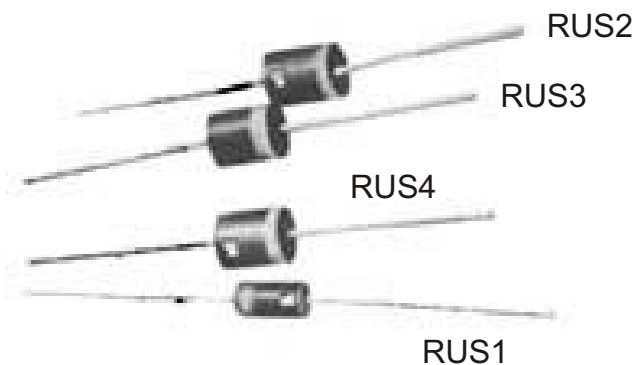




RUS

50 ULTRA-FAST RECOVERY AXIAL LEAD RECTIFIER DIODES

PRV to 600 V  
 50ns recovery  
 Small size  
 High temperature stability  
 High surge capability  
 Exceptionally low leakage  
 Avalanche characteristics

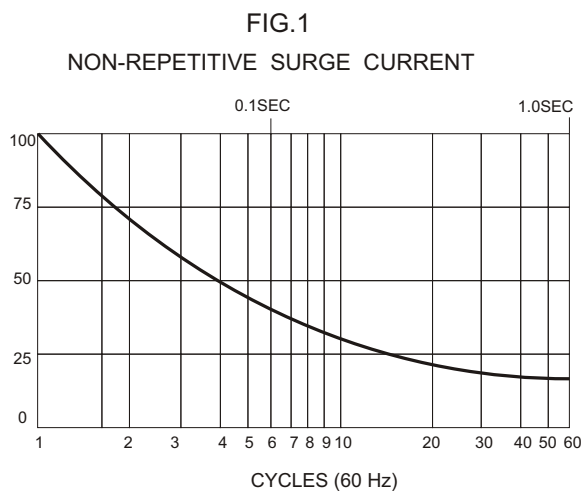
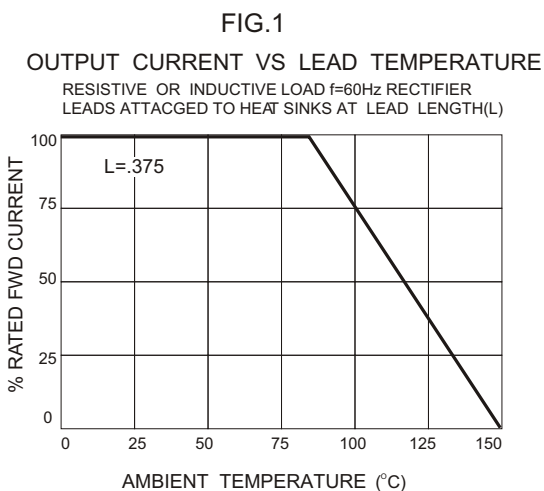


|      |        |        |        |        |
|------|--------|--------|--------|--------|
| PRV  | 200V   | 400V   | 500V   | 600V   |
| RUS1 | RUS120 | RUS140 | RUS150 | RUS160 |
| RUS2 | RUS220 | RUS240 | RUS250 | RUS260 |
| RUS3 | RUS320 | RUS340 | RUS350 | RUS360 |
| RUS4 | RUS420 | RUS440 | RUS450 | RUS460 |

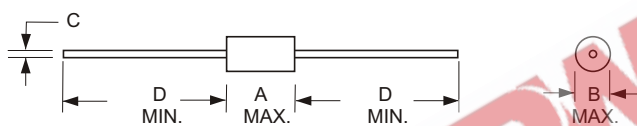
ELECTRICAL CHARACTERISTICS(at T<sub>A</sub>=25 °C Unless Otherwise Specified)

|  | RUS1           | RUS2     | RUS3     | RUS4     | UNITS         |
|--|----------------|----------|----------|----------|---------------|
| Average Rectified Forward Current, I <sub>o</sub> @80 °C lead temperature, L=3/8" (Fig.1)                      | 1.5            | 3.5      | 5        | 5        | Amps          |
| Max. DC Reverse Current @ PRV and 25 °C, I <sub>R</sub>  | 1              | 5        | 5        | 5        | μA            |
| Max. DC Reverse Current @ PRV and 100 °C, I <sub>R</sub>   | 50             | 100      | 100      | 100      | μA            |
| Max. Peak Surge Current, I <sub>FSM</sub> (8.3μsec) (Fig2)   | 50             | 100      | 240      | 320      | Amps(pk)      |
| Max. Forward Voltage Drop @ 25°C, V <sub>F</sub><br>with Forward Current pulse I <sub>F</sub> (300 μsec width) | 1.3<br>1       | 1.3<br>3 | 1.3<br>4 | 1.3<br>5 | Volts<br>Amps |
| Reverse Recovery Time, T <sub>rr</sub> (Fig.4)   | 50             | 50       | 50       | 50       | nsec.         |
| Ambient Operating Temperature Range, T <sub>A</sub>  | -55 to +150 °C |          |          |          |               |
| Storage Temperature Range, T <sub>STG</sub>  | -55 to +150 °C |          |          |          |               |

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

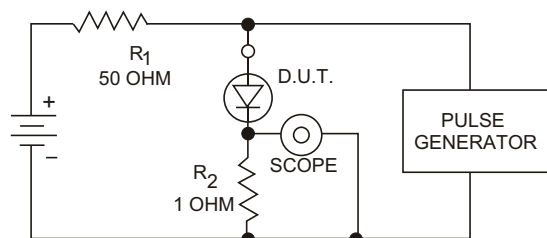
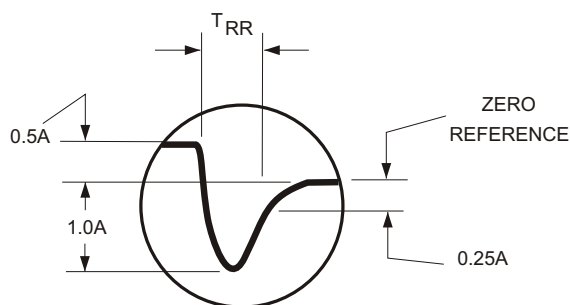


**FIG.3**  
**MECHANICAL**



|      | DIMENSIONS(inches) |      |                       |      |
|------|--------------------|------|-----------------------|------|
|      | A                  | B    | C                     | D    |
| RUS1 | .380               | .160 | $\frac{0.033}{0.031}$ | 1.00 |
| RUS2 | .380               | .260 | $\frac{0.052}{0.048}$ | 1.00 |
| RUS3 | .380               | .260 | $\frac{0.052}{0.048}$ | 1.00 |
| RUS4 | .380               | .310 | $\frac{0.052}{0.048}$ | 1.00 |

**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  $I_R$