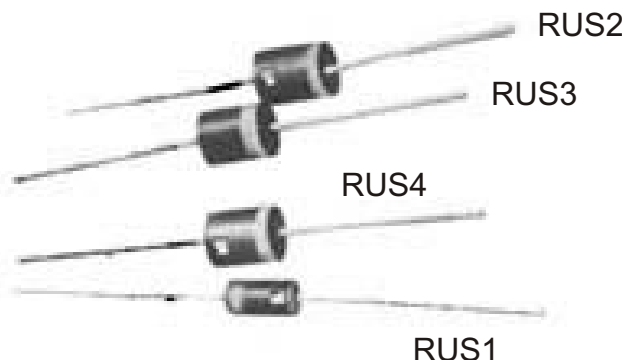




RUS

## 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



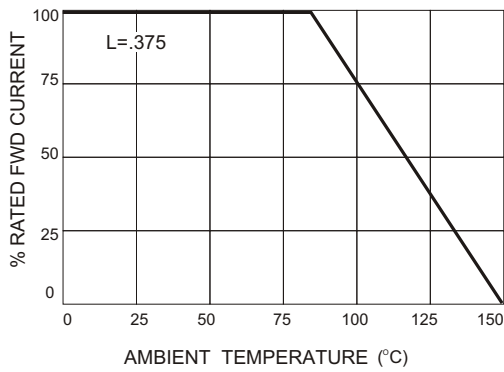
PRV	200V	400V	500V	600V
RUS1	RUS120	RUS140	RUS150	RUS160
RUS2	RUS220	RUS240	RUS250	RUS260
RUS3	RUS320	RUS340	RUS350	RUS360
RUS4	RUS420	RUS440	RUS450	RUS460

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

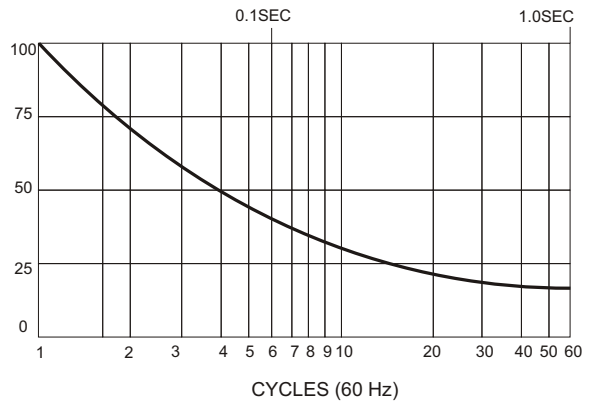
	RUS1	RUS2	RUS3	RUS4	UNITS
Average Rectified Forward Current, I <sub>o</sub> @80 °C lead temperature, L=3/8" (Fig.1)	1.5	3.5	5	5	Amps
Max. DC Reverse Current @ PRV and 25 °C, I <sub>R</sub>	1	5	5	5	μA
Max. DC Reverse Current @ PRV and 100 °C, I <sub>R</sub>	50	100	100	100	μA
Max. Peak Surge Current, I <sub>FSM</sub> (8.3 μsec) (Fig2)	50	100	240	320	Amps(pk)
Max. Forward Voltage Drop @ 25°C, V <sub>F</sub> with Forward Current pulse I <sub>F</sub> (300 μsec width)	1.3 1	1.3 3	1.3 4	1.3 5	Volts 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.

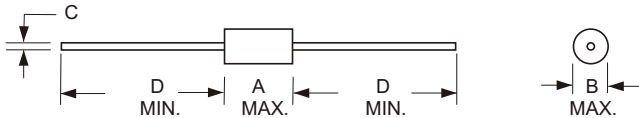
**FIG.1**  
**OUTPUT CURRENT VS LEAD TEMPERATURE**  
 RESISTIVE OR INDUCTIVE LOAD f=60Hz RECTIFIER  
 LEADS ATTACHED TO HEAT SINKS AT LEAD LENGTH(L)



**FIG.1**  
**NON-REPETITIVE SURGE CURRENT**

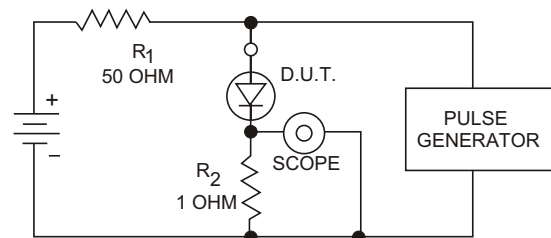
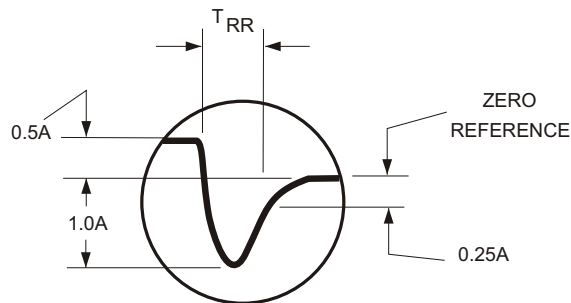


**FIG.3**  
**MECHANICAL**



	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<sub>1</sub>, R<sub>2</sub> NON-INDUCTIVE RESISTORS  
 PULSE GENERATOR-HEWLETT PACKARD 214A OR EQUIV.  
 IKC REP.RATE, 10 μ SEC. PULSE WIDTH  
 ADJUST PULSE AMPLITUDE FOR PEAK I<sub>R</sub>