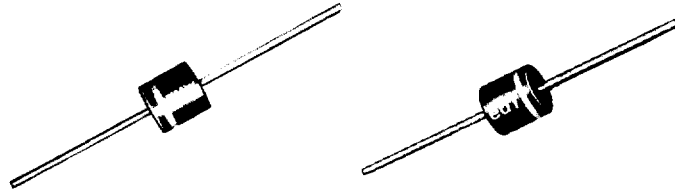


HIGH VOLTAGE, HIGH CURRENT ULTRA-FAST RECOVERY SILICON RECTIFIER DIODES



PRV	1200	1500	1800
TYPE	3RUS2120 3RUS4120	3RUS2150 3RUS4150	3RUS2180 3RUS4180

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

Type	3RUS2	3RUS4
Avg. Rectified Forward Current @ 50°C Amb., I_O (Fig. 1)	1.25 Amp	1.50 Amp
Avg. Output Current @ 80°C lead temperature Lead Temp-measured $\frac{3}{8}$ " from body of diode	2.0 Amp	2.5 Amp
Max. Reverse Current @ PRV and 25°C , I_R	$5\mu\text{A}$	$5\mu\text{A}$
Max. Reverse Current @ PRV and 100°C , I_R	$50\mu\text{A}$ Max	$100\mu\text{A}$
Max. Forward Voltage Drop @ 25°C , 2.0 Amps, V_F	4 V.	4 V.
Max. Peak Surge Current, I_{FSM} (8.3 ms) (Fig. 2)	100 A	300 A
Operating Temp. Range	-65°C to $+150^\circ\text{C}$	
Storage Temp. Range	-65°C to $+150^\circ\text{C}$	
Reverse Recovery Time, t_{rr}	50 nanosec	

NOTE: Maximum lead and terminal temperature for soldering, $\frac{3}{8}$ inch from case, 5 seconds at 250°C .



ELECTRONIC DEVICES, INC.

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FIG. 1

OUTPUT CURRENT vs TEMPERATURE

RESISTIVE OR INDUCTIVE LOAD $f = 60\text{Hz}$ RECTIFIER
LEADS ATTACHED TO HEAT SINKS AT LEAD LENGTH (L)

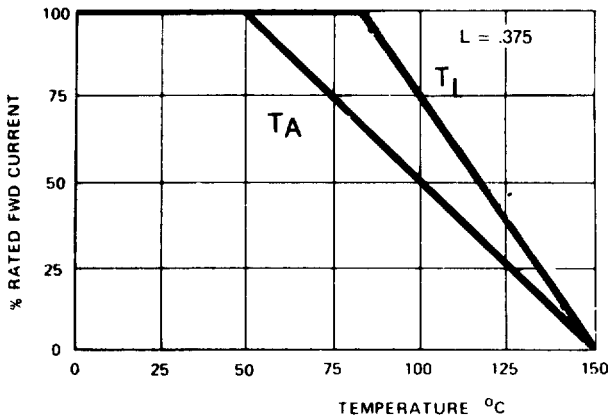


FIG. 2

NON - REPETITIVE SURGE CURRENT

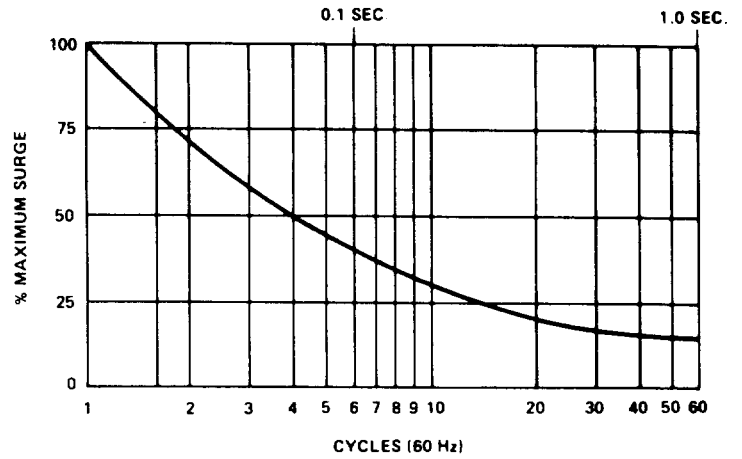
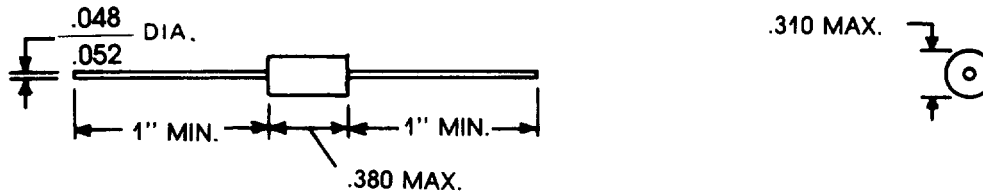


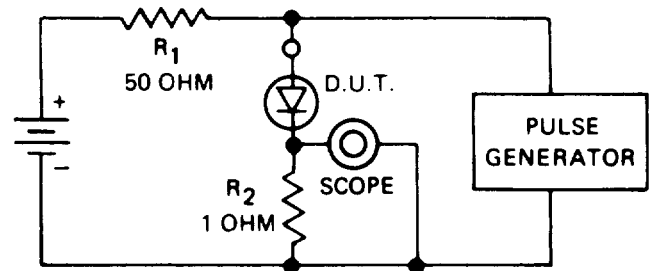
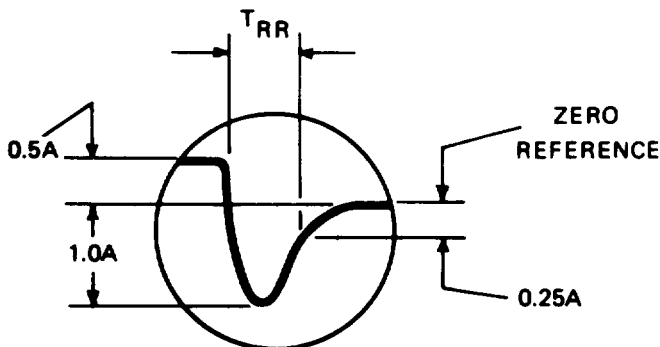
FIG. 3
PACKAGE STYLE



TEST CIRCUIT

FIG. 4

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