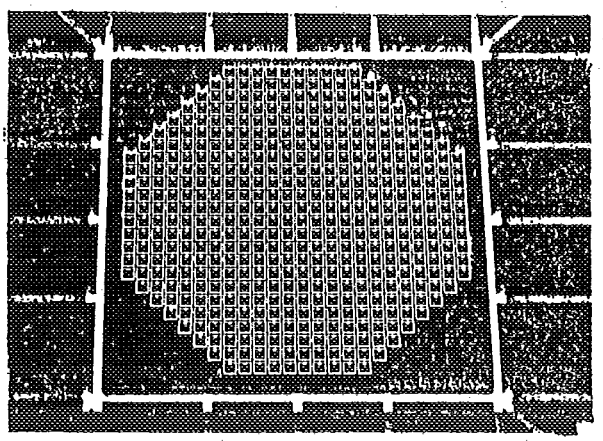
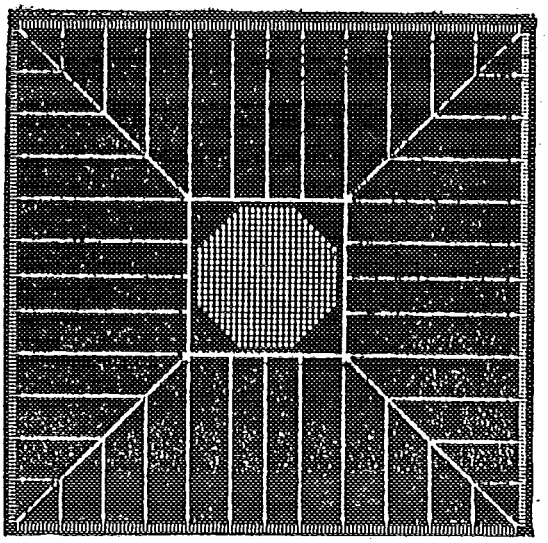
CENTRONIC

TECHNICAL DATA SHEET

T-41-55



(Element Area)



(Actual Size)

UNIVERSITY OF TEXAS
464-ELEMENT SENSEMAN SILICON PHOTODIODE ARRAY

DESCRIPTION

The University of Texas multi-element photodiode array, manufactured by CENTRONIC INC., E-O DIVISION, consists of 464 individual high performance silicon photodiodes. Each photodiode can be individually addressed. The array is fabricated as a monolythic chip which is mechanically divided after mounting on a multi-layer ceramic carrier with 464 terminals and a common terminal system. The ceramic carrier is 2.740" square and 0.060" thick. The array was manufactured according to an original concept created by Dr. David Senseman of the University of Texas.

APPLICATION

The array was specifically designed to study luminous phenomena in the brain of rats. Other applications are expected due to the unique low light level detectivity and high speed of response of array elements.

TECHNICAL INFORMATION

Material	-	Silicon P on N construction
Element Size	-	0.028" x 0.028" (0.71mm x 0.71mm)
Element Period	-	0.030" center to center (0.762mm)
Element Sensitive Area	-	0.31mm^2
Number of Elements	-	464
Element Dynamic Resistance	-	> 10^9 ohms
Responsivity	-	Min. 0.15 A/W at 450nm
Peak Responsivity	-	850nm
Element Capacitance	-	Typ. 16pF at 0 Volts
Element Passivation	-	Silicon Nitride

CENTRONIC INC.
E-O Division

Morgan ELECTRONICS DIVISION

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