

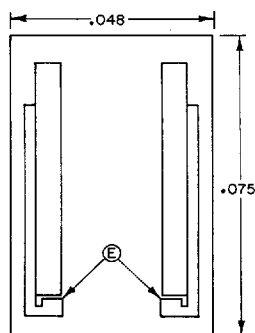
Array Chips — Detectors

Clairex offers a broad range of custom and stock dual and multichannel chips and arrays. Chips may be selected for special electrical requirements, i.e., light sensitivity, breakdown voltage, dark current, etc. All chips have gold backing suitable for either

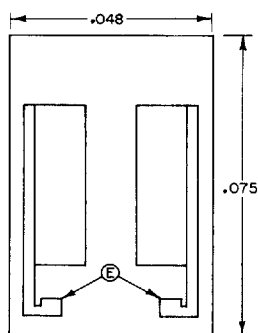
eutectic or conductive epoxy ohmic die attachment. Aluminum pads accept either thermocompression ball or ultrasonic wedge wire bonding. Packaging of chips may be in glass vials, "waffle" carriers or other suitable means.

PHOTOTRANSISTOR ARRAY CHIPS

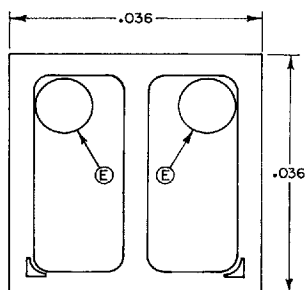
Symbol	Characteristic	Test Condition	CLCT 809	CLCT 809A	CLCT 810	CLCT 810A	CLCT 726	CLCT 726A	CLCT 511A-4	Unit
LWX	Active Area - One Channel		.006x.058	.006x.058	.012x.040	.012x.040	.013x.030	.013x.030	.018x.018	Inches
CC	Center to Center Spacing		.030	.030	.024	.024	.016	.016	.025	Inches
I_L	Light Current - min	$V_{CE} = 5v$, $H = 5mw/cm^2 (1)$	0.2	0.5	0.25	0.60	0.2	0.5	0.5	mA
$I_D (I_{CEQ})$	Dark Current - max	$V_{CE} = 5v$, $H = 0$	40	40	40	40	40	40	40	NA
H_{FE}	Current Gain	$V_{CE} = 10v$, $I_B = 1 \mu A$	100	500	100	500	100	500	500	
BV_{CEO}	Collector to Emitter Breakdown Voltage	$I_{CE} = 0.1 mA$	35	35	35	35	35	35	35	Volts
BV_{ECO}	Emitter to Collector Breakdown Voltage	$I_{EC} = 0.1 mA$	6	6	6	6	6	6	6	Volts
$V_{CE(SAT)}$	Collector to Emitter Saturation Voltage	$I_C = 1mA$, $I_B = 0.05 mA$	0.5 (3)	0.5 (3)	0.5 (3)	0.5 (3)	0.5 (3)	0.5 (3)	0.5	Volts
tr/tf	Rise or Fall Time Typical	$R_L = 100\Omega$ (2) $V_{CC} = 10v$	3	5	4	6	3	5	5	μSec



DUAL
CLCT 809



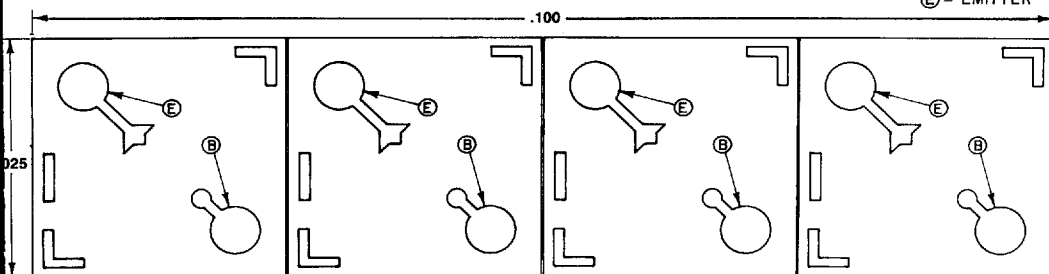
DUAL
CLCT 810



DUAL
CLCT 726

(A) = ANODE
(B) = BASE
(E) = EMITTER

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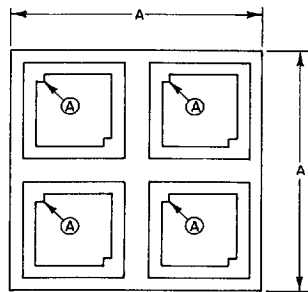
CLCT 511A-4

2142799 0001069 570

PHOTODIODE ARRAY CHIPS

Symbol	Characteristic	Test Condition	CLCD 765-4	CLCD 637-4	CLCD 621-4	Unit
LXW	Active Area - One Channel		.015 x .015	.051 x .051	.125 x .125	Inches
CC	Center to Center Spacing		.025	.060	.140	Inches
I _{sc}	Short Circuit Current - Min (1)	H = 5mw/cm ²	1	8	50	μA
I _D	Dark Current - Max	H = 0, V = - 100mV	10	10	25	NA
C _J	Junction Capacitance Typical	V = 0, f = 1 MHZ	7	35	200	pf
tr/tf	Rise or Fall Time Typical	V = 0, R _L = 1KΩ (2)	4	5	10	μs

Note 1: The light source is a frosted tungsten incandescent lamp at 2854°K.
Note 2: The light source is a gallium arsenide LED pulsed with a rise and fall time of < 0.3 μ sec.
Note 3: H = 20mW/cm², ICE = .2ma.
All characteristics are specified at 25° C.



QUAD # A=
CLCD 765-4 .050
CLCD 637-4 .120
CLCD 621-4 .280

2142799 0001070 292