

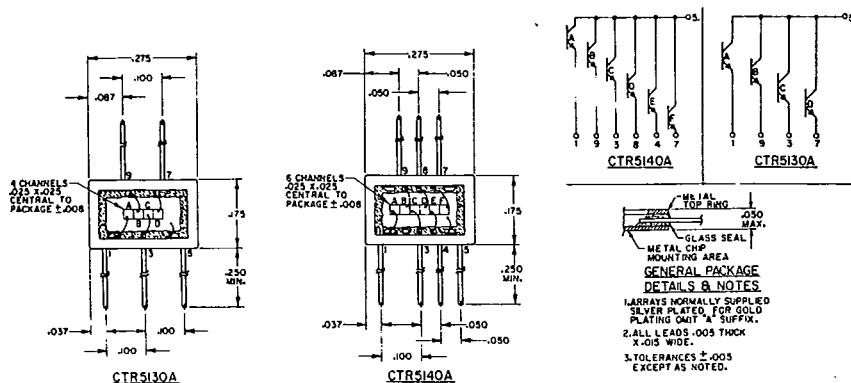
Opto-Arrays

T-41-99

Clairex Electronics Silicon Division welcomes inquiries for customer designed arrays of emitter and sensor chips in a wide variety of packages. Individual chips may be positioned in a pattern, or multiple sensor chip patterns may be designed for close and precise spacings. Packages may be chosen to include discrete multiple lead headers, ceramic or PC board substrates, molded boards and housings. The arrays may be supplemented with assemblies of discrete or

thick film circuit components, or complete mechanical module configurations may be assembled. Terminations may typically be furnished as plug-in pins, radial leads, surface mount leadless carriers or flexible insulated wires and ribbon cable.

Some examples of custom packaged arrays we have designed for specific customer applications are illustrated below.



ELECTRICAL CHARACTERISTICS (25° C Free Air unless otherwise designated)

Symbol	Characteristics	Test Conditions	5130A Min. Max.	5140A Min. Max.	Units
I_L	Light Current	$H = 1\text{mw/cm}^2$ $V_{ce} = 5\text{v}$	150	150	μA
	Matching Factor	$(I_{LH} - I_{LL}) / I_{LH}$	.4	.4	
I_D	Dark Current	$V_{ce} = 10\text{V}$ $H = 0$	100	100	NA
BV_{ceo}	Collector Emitter Breakdown Voltage	$I_{ce} = .1\text{ma}$	40	40	V
BV_{eco}	Emitter Collector Breakdown Voltage	$I_{ec} = .1\text{ma}$	5	5	V
$V_{CE(sat)}$	Collector Emitter Saturation Voltage	$H = 20\text{mw/cm}^2$ $I_{ce} = .5\text{ma}$	.4	.4	V
T_R 3/TF	Rise/fall times (unsaturated times)	$R_L = 100\text{ohms}$ $V_{cc} = 5\text{v}$	3 TYP	3 TYP	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 $< 0.3 \mu\text{sec}$

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