

T-41-83

**CLA864A  
CLA864B  
CLA864C**

**Transistor Output**

**GENERAL DESCRIPTION** — The Clairex CLA864 series of axial lead isolators are designed for those applications where high voltage isolation requirements apply. They consist of an infrared LED coupled with an NPN phototransistor providing excellent switching speeds and guaranteed minimum transfer ratios. These units are UL recognized.

**ABSOLUTE MAXIMUM RATINGS**

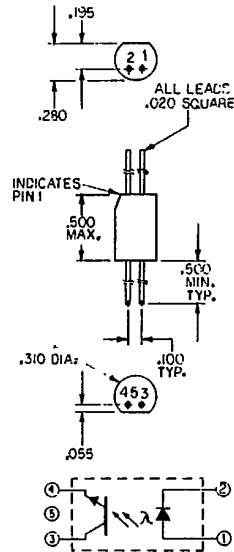
Input to output voltage 10KvDc  
Operating temperature range -40°C to 85°C  
Storage temperature range -40°C to 100°C

**LED**

Forward DC current = 40ma  
Reverse DC voltage = 3V  
Power dissipation = 100mw  
Derate 1.33 mw/°C

**DETECTOR**

Collector - emitter voltage = 30V  
Emitter - collector voltage = 5V  
Power dissipation = 150mw  
Derate 2.0mw/°C



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**TECHNICAL DATA**

ELECTRICAL CHARACTERISTICS @ 25°C	MIN	TYP	MAX	UNIT
<b>Input Diode</b>				
Vf @ If = 20ma			1.6	V
Ir @ Vr = 3.0 volts			10	µa
<b>Output Phototransistor</b>				
BVceo @ Ic = 100µa	30			V
BVeco @ Ie = 100µa	5			V
Id @ Vce = 15V			100	na
Id @ Vce = 20V			200	na
<b>Coupled</b>				
Ic/If @ = 10ma, Vce = 5V				
CLA864	12.5			%
CLA864A	25			%
CLA864B	50	125		%
CLA864C	100			%
Isolation voltage (DC)	10			KV
Vce (sat) @ If = 10ma, Ic = 1.60ma			0.4	V
Isolation voltage (AC): 1min	3500			VAC
TR/TF @ Vcc = 5V, PL = 100ohms, unsaturated		5		µS

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