

T-41-11

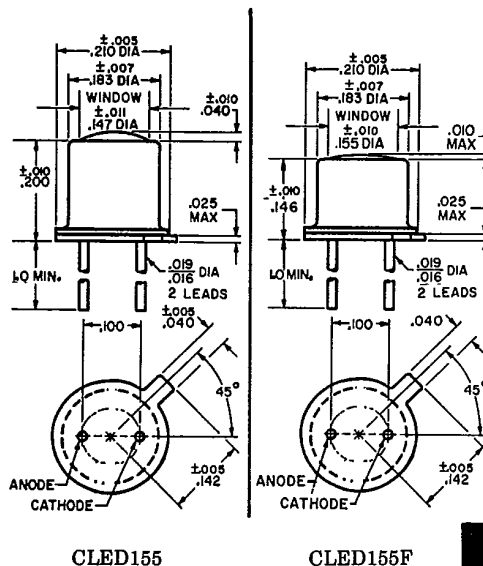
## CLED155 CLED155F

### Gallium Aluminum Arsenide Infrared Emitting Diode

**GENERAL DESCRIPTION** — The Clairex CLED155 series Gallium Aluminum Arsenide diodes are in hermetically sealed TO46 packages. The lensed CLED155 emits a controlled pattern of infrared radiation whereas the flat window CLED155F radiates a wide angle pattern. The peak spectral point is 880nm, thereby greatly matching Clairex's silicon photosensors.

#### ABSOLUTE MAXIMUM RATINGS

Continuous Current: 100ma (with heat sink)  
Reverse Voltage: 3V  
Peak Pulsed Current (P.W. = 1 $\mu$ s, DF = .01): 3Amp  
Power Dissipation: 165mw  
Derate: 1.65mw/ $^{\circ}$ C  
Operating Junction Temp. 125 $^{\circ}$ C



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#### ELECTRICAL CHARACTERISTICS (25 $^{\circ}$ C Free Air unless otherwise designated.)

Symbol	Characteristics	Test Conditions	Min.	Typ.	Max.	Unit
P <sub>o</sub>	Output Power CLED155, 155F 155A, 155FA 155B, 155FB 155C, 155FC 155D, 155FD	I <sub>F</sub> = 50 ma	3.0 3.5 4.5 5.25 6.00			milliwatts milliwatts milliwatts milliwatts milliwatts
$\lambda$ PEAK	Wave Length			.88		microns
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 50 ma			1.8	volts
BV <sub>R</sub>	Reverse Breakdown Voltage	I <sub>R</sub> = 10 $\mu$ a	3.0			volts
$\theta$	1/2 Power Angle CLED 155 155F			20 60		degrees degrees

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