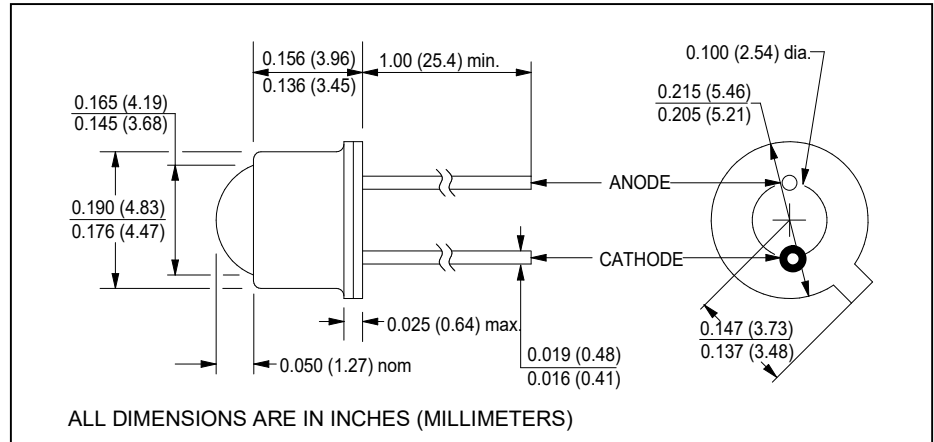


CLE435

Red LED, Gallium Arsenide Phosphide

Dome Lens Can



features

- 660nm wavelength
- hermetic style package
- narrow collimated beam

description

The CLE435 is an advanced, high-efficiency, high speed, GaAsP light emitting diode. The TO-46 header provides the thermal environment for reliable operation over an extremely wide temperature range. The lens is designed to provide a highly collimated radiation pattern from 0.10" to 0.20" from the lens tip. Call Clairex for applications assistance.

absolute maximum ratings (T_A = 25°C unless otherwise stated)

storage temperature.....	-65°C to +150°C
operating temperature	-65°C to +125°C
lead soldering temperature ⁽¹⁾	260°C
continuous forward current ⁽²⁾	60 mA
peak forward current(1.0 ms pulse width, 10% duty cycle).....	1 A
reverse voltage	5 V
continuous power dissipation ⁽³⁾	200 mW

notes:

1. 0.06" (1.5 mm) from the header for 5 seconds maximum.
2. Derate linearly 0.48 mA/°C from 25°C free air temperature to T_A = +125°C.
3. Derate linearly 1.60 mW/°C from 25°C free air temperature to T_A = +125°C.

electrical characteristics (T_A = 25°C unless otherwise noted)

symbol	parameter	min	typ	max	units	test conditions
I _V	Luminous intensity	-	200	-	mcd	I _F = 20 mA
Φ _V	Luminous flux	-	25	-	mlm	I _F = 20 mA
V _F	Forward voltage	-	1.8	2.1	V	I _F = 20 mA
I _R	Reverse current	-	-	10	μA	V _R = 5 V
λ _P	Peak emission wavelength	650	660	670	nm	I _F = 20 mA
Θ _{HP}	Emission angle at half power points	-	22	-	deg.	I _F = 20 mA
t _r , t _f	Radiation rise and fall time	-	40	-	ns	I _{F(PK)} = 100 mA, f = 1 kHz, Duty Cycle = 50%



Clairex reserves the right to make changes at any time to improve design and to provide the best possible product.