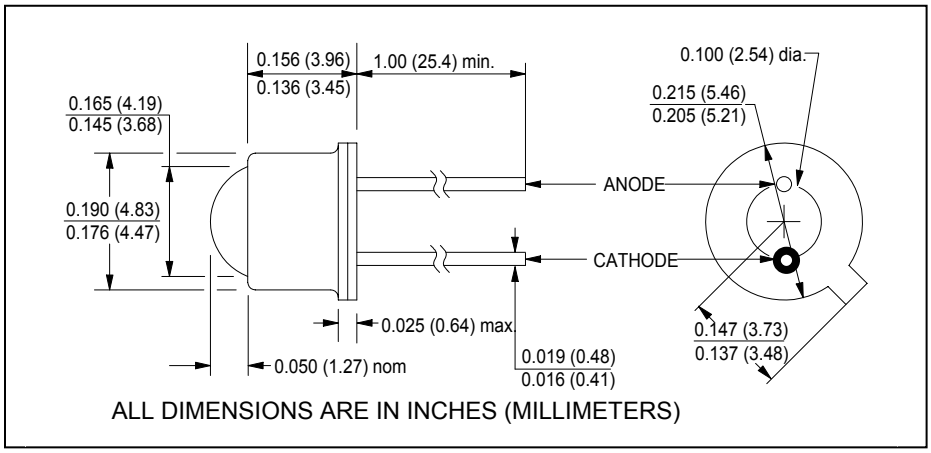
CLE436

Preliminary

High Power Red LED – Minimal Infrared Content
Dome Lens Can, Hermetically Sealed

March, 2006



features

- Dome lens TO-46 Package
- Minimal infrared content
- ± 11° emission angle
- High luminous flux
- RoHS compliant

description

The CLE436 is an advanced, high-efficiency, high speed, GaAlAs red light emitting diode designed for minimal light in the infrared region. Radiated emissions above 750nm are less than 0.1% of emissions at 660nm. For additional information, call Clairex.

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]	60mA
reverse voltage	5V
peak forward current (1.0ms pulse width, 10% duty cycle)	1A
continuous power dissipation[3]	200mW

notes:

1. 0.06" (1.5mm) from case for 5 seconds maximum.
2. Derate linearly 0.48mA/°C from 25°C free air temperature to T_A = +125°C.
3. Derate linearly 1.60mW/°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	-	650	-	mcd	I_F = 20mA
Φ_V	Luminous flux	-	72	-	mlm	I_F = 20mA
V_F	Forward voltage	-	-	2.2	V	I_F = 20mA
I_R	Reverse current	-	-	10	μA	V_R = 5.0V
θ_{HP}	Emission angle at half power points	-	22	-	deg.	I_F = 20mA
λ_p	Peak Wavelength	650	660	670	nm	I_F = 20mA

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Clairex Technologies, Inc. 1301 East Plano Parkway Plano, Texas 75074-8524
Phone: 972-265-4900 Fax: 972-265-4949 www.clairex.com