

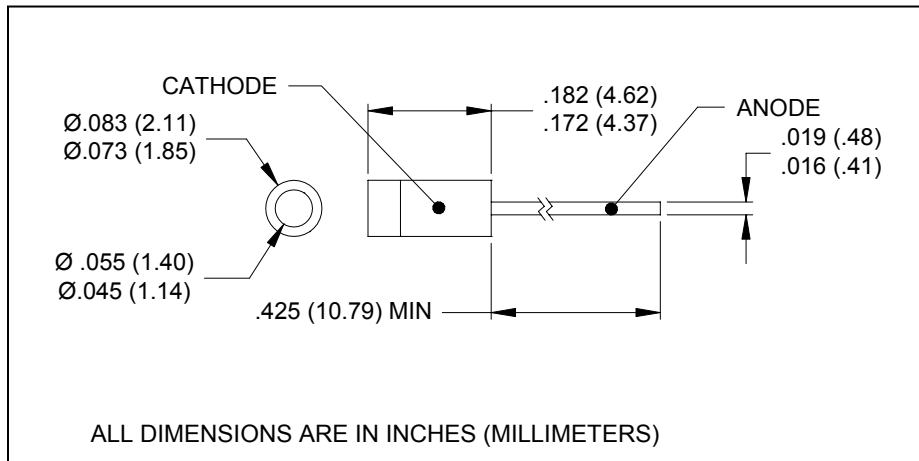
CLE549W

High Power GaN White LED Flat Window Hermetic Coaxial Package

Preliminary



January, 2005



features

- Flat window miniature coaxial package
- $\pm 50^\circ$ emitting angle
- cathode connected to case
- High luminous flux
- RoHS compliant

description

The CLE549W contains an advanced, high efficiency, high output, GaN blue emitting LED mounted in a miniature hermetic package. A phosphor coating is applied to the die which, when excited, emits white light. It is intended for applications requiring uniform output pattern over a relatively large area and where the application requires close mounting of emitters. Contact Clairex for additional information.

absolute maximum ratings ($T_A = 25^\circ\text{C}$ 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⁾	55mA
reverse voltage	5.0V
peak forward current (1.0ms pulse width, 10% duty cycle)	0.25A
continuous power dissipation ⁽³⁾	200mW

notes:

1. 0.06" (1.5mm) from case for 5 seconds maximum.
2. Derate linearly 0.44mA/°C from 25°C free air temperature to $T_A = +125^\circ\text{C}$.
3. Derate linearly 1.60mW/°C from 25°C free air temperature to $T_A = +125^\circ\text{C}$.

electrical characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
symbol	parameter	min	typ	max	units	test conditions
Φ_V	Luminous flux	-	820	-	mlm	$I_F = 20\text{mA}$
V_F	Forward voltage	-	3.2	3.6	V	$I_F = 20\text{mA}$
I_R	Reverse current	-	-	5.0	μA	$V_R = 5.0\text{V}$
θ_{HP}	Emission angle at half power points	-	100	-	deg.	$I_F = 20\text{mA}$

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

Revised 3/20/06