

# CLE536W

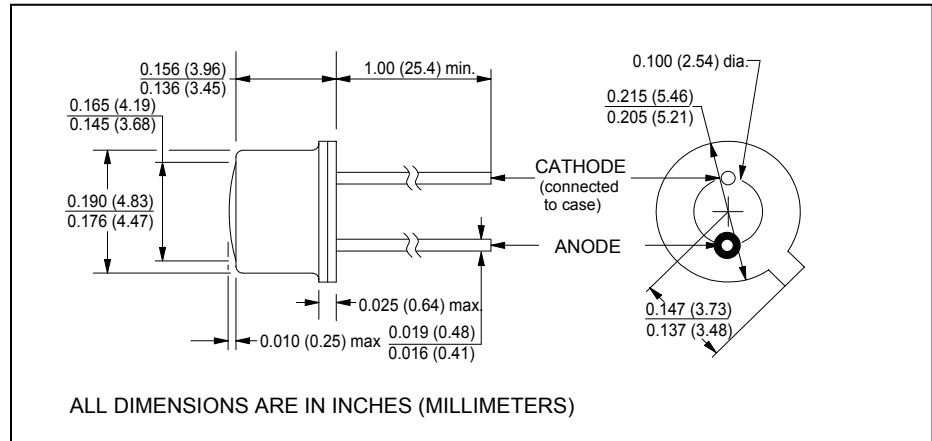
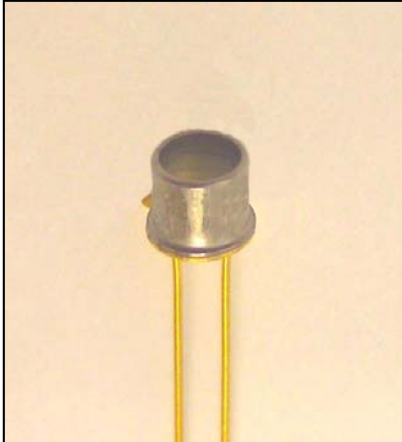
## High Power Blue LED

### Flat Window Can, Hermetically Sealed

Preliminary



March, 2006



#### features

- Flat lens TO-46 Package
- $\pm 35^\circ$  emission angle
- High luminous flux
- cathode connected to case
- RoHS compliant

#### description

The CLE536 contains a GaN, high power output, blue LED mounted on a TO-46 header. The TO-46 header provides the thermal environment for reliable operation over a wide temperature range. For additional information, call Clairex.

#### absolute maximum ratings ( $T_A = 25^\circ\text{C}$ unless otherwise stated)

storage temperature .....	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
operating temperature .....	$-65^\circ\text{C}$ to $+125^\circ\text{C}$
lead soldering temperature <sup>(1)</sup> .....	$260^\circ\text{C}$
continuous forward current <sup>(2)</sup> .....	55mA
reverse voltage .....	5.0V
peak forward current (1.0ms pulse width, 10% duty cycle) .....	0.25A
continuous power dissipation <sup>(3)</sup> .....	200mW

#### notes:

1. 0.06" (1.5mm) from case for 5 seconds maximum.
2. Derate linearly 0.44mA/ $^\circ\text{C}$  from  $25^\circ\text{C}$  free air temperature to  $T_A = +125^\circ\text{C}$ .
3. Derate linearly 1.60mW/ $^\circ\text{C}$  from  $25^\circ\text{C}$  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
$\Phi_V$	Luminous flux	-	87.5	-	mlm	$I_F = 20\text{mA}$
$V_F$	Forward voltage	-	3.2	3.6	V	$I_F = 20\text{mA}$
$I_R$	Reverse current	-	-	10	$\mu\text{A}$	$V_R = 5.0\text{V}$
$\theta_{HP}$	Emission angle at half power points	-	70	-	deg.	$I_F = 20\text{mA}$
$\lambda_p$	Peak Wavelength	460	465	470	nm	$I_F = 20\text{mA}$

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

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Clairex Technologies, Inc.  
Phone: 972-265-4900

1301 East Plano Parkway  
Fax: 972-265-4949

Plano, Texas 75074-8524  
www.clairex.com