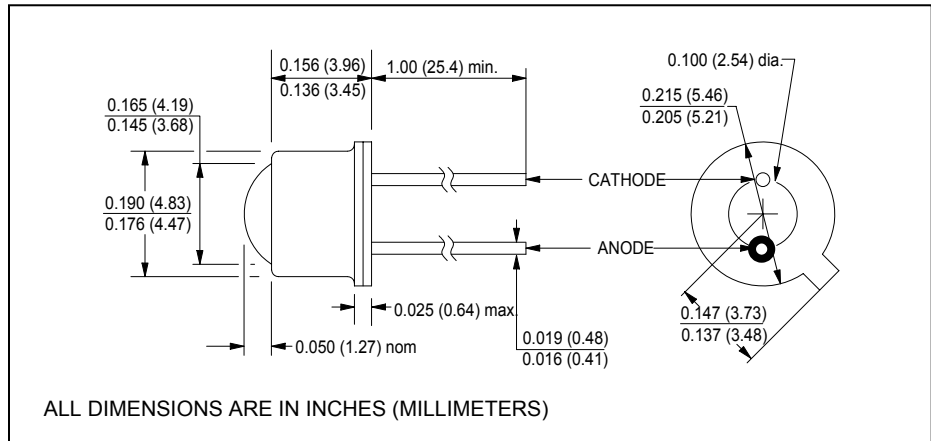
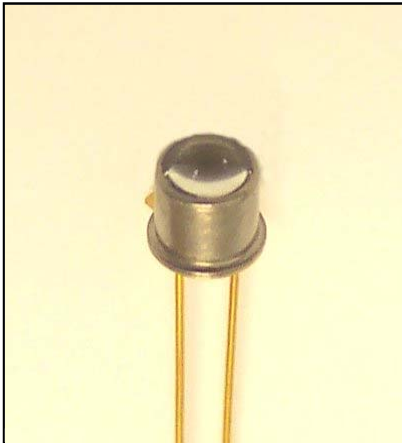




MCDE-535

High Power GaN Green LED Dome Lens Can, Hermetically Sealed



features

- Dome lens TO-46 package
- $\pm 11^\circ$ emitting angle
- High luminous intensity
- High luminous flux
- Cathode connected to case

Description

The MCD-535 is an advanced, high-efficiency, high speed, GaN 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.

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.....	5V
peak forward current (1.0ms pulse width, 10% duty cycle).....	1A
continuous power dissipation ⁽³⁾	200mW

notes:

1. 0.06" (1.5mm) from the header for 5 seconds maximum.
2. Derate linearly 0.48mA/°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
I_V	Luminous intensity	-	10,500	-	mcd	$I_F = 20\text{mA}$
Φ_V	Luminous flux	-	1,200	-	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	μA	$V_R = 5\text{V}$
λ_P	Peak emission wavelength	520	530	540	nm	$I_F = 20\text{mA}$
Θ_{HP}	Emission angle at half power points	-	15	-	deg.	$I_F = 20\text{mA}$
t_r, t_f	Radiation rise and fall time	-	40	-	ns	$I_{F(PK)} = 100\text{mA}$, $f = 1\text{kHz}$, Duty Cycle = 50%

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