

Notes:

All dimensions are in millimeters, tolerance is 0.25 mm except being specified. Lead spacing is measured where the lead emerges from the package. Protruded resin under flange is 1.5 mm Max LED

AND420HWC
InGaN Super White Blue Light Emission
T-1 3/4 Package (5 mm)

Features

- Popular T-1 3/4 round package
- High luminous power
- Typical chromaticity coordinates $x=0.30$, $y=0.29$ according to CIE 1931
- Bulk, available tape and reel
- ESD-withstand voltage: up to 4KV
- RoHS compliant

This series is designed for applications requiring high luminous intensity. The phosphor filled in the reflector converts the blue emission on InGaN to ideal white.

Applications: Message panels, optical indicators, backlighting, marker lights

Absolute Maximum Ratings (Ta - 25 °C)

Item	Symbol	Rating	Unit
Continuous Forward Current	I_F	30	mA
Peak Forward Current (Duty 1/10@ 1KHz)	I_{FP}	100	mA
Operating Temperature Range	T_{OPR}	-40 to 85	°C
Storage Temperature Range	T_{STG}	-40 to 100	°C
Electrostatic Discharge	ESD	4K	V
Soldering Temperature (T = 5 seconds)	T_{SOL}	260	°C
Power Dissipation	P_D	110	mW
Reverse Voltage	V_R	5	V

Electro-Optical Characteristics

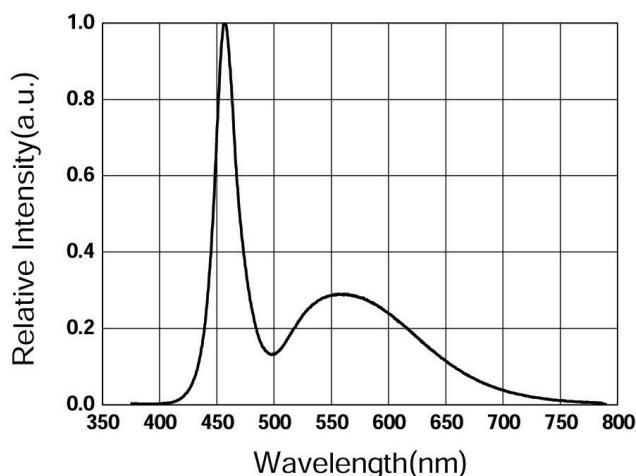
Item	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F = 20 \text{ mA}$	2.8	—	3.6	V
Reverse Current	I_R	$V_R = 5 \text{ V}$	—	—	50	μA
Luminous Intensity	I_v	$I_F = 20 \text{ mA}$	11250	—	22500	mcd
Chromaticity Coordinated	x	$I_F = 20 \text{ mA}$	—	0.30	—	—
	y	$I_F = 20 \text{ mA}$	—	0.29	—	—
Viewing Angle	$2\theta \ 1/2$	$I_F = 20 \text{ mA}$	—	23	—	degree

Product specifications contained herein may be changed without prior notice.

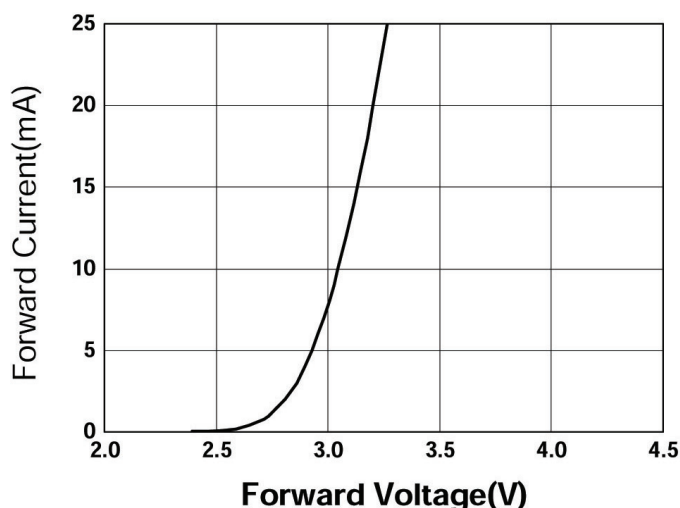
It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

Typical Electro-Optical Characteristics Curves

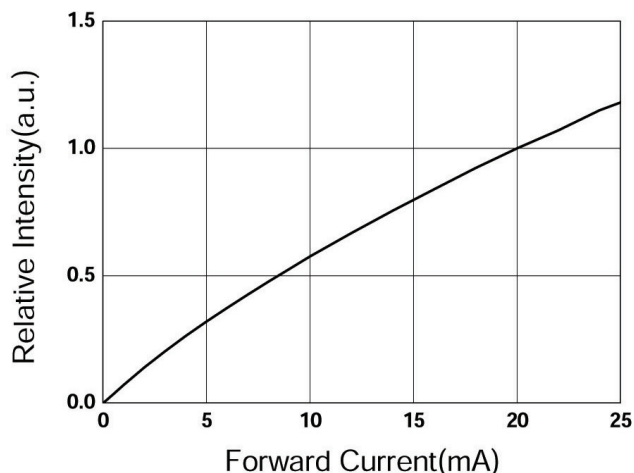
Relative Intensity vs. Wavelength



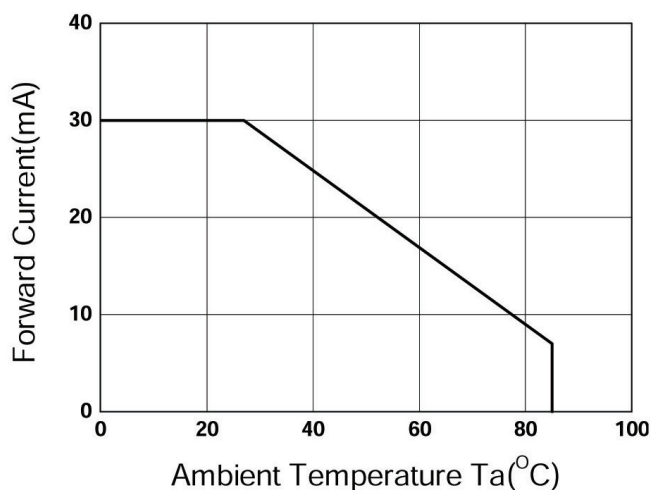
Forward Current vs. Forward Voltage



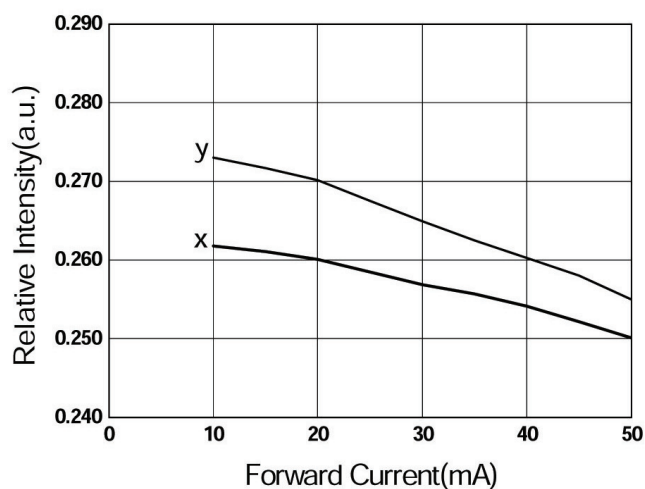
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Displacement

