

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

AND190HW

InGaN High Brightness White Light Emission T-1 Package (10 mm)

The series is designed for application required high luminous intensity. The phosphor filled in the reflector converts the blue emission of InGaN chip to ideal white.

Features

- Popular T-1 colorless 10mm package
- High luminous power
- Typical chromaticity coordinates x=0.29, y=0.28 according to CIE1931
- Bulk, available taped on reel
- Pb free
- The product itself will remain within RoHS compliant version.
- **RoHS compliant**

Applications: outdoor displays, optical indicators, backlighting, marker lights

Maximum Ratings (Ta - 25 °C)

Characteristic	Symbol	Rating	Unit
Continuous Forward Current	I _F	25	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	120	mW
Operating Temperature Range	T _{OPR}	-30 ~ +85	°C
Storage Temperature Range	T _{STG}	-40 to 100	°C
Soldering Temperature (T=5 sec)	T _{SOL}	260 ± 5	°C
Electrostatic Discharge	ESD	150	V

Electro-Optical Characteristics (Ta = 25°C)

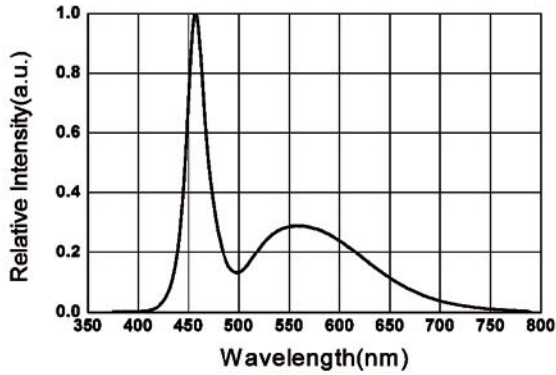
Item	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F = 20 mA	–	3.5	4.0	V
Reverse Current	I _R	V _R = 5 V	–	–	50	μA
Luminous Intensity	I _v	I _F = 20 mA	3,600	5,000	–	mcd
Chromaticity Coordinates	x	I _F = 20 mA	–	0.29	–	nm
	y		–	0.28	–	nm
Viewing Angle	2 θ 1/2	I _F = 20 mA	–	10	–	degree

Product specifications contained herein may be changed without prior notice.

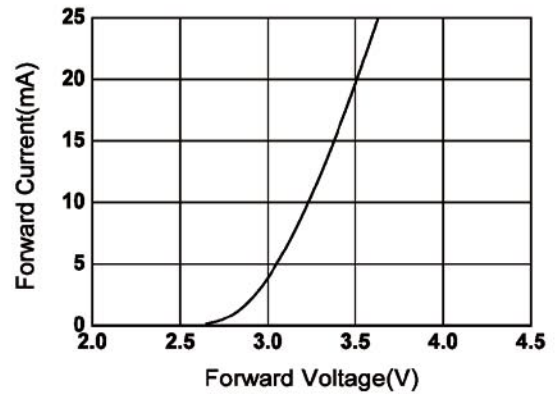
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Typical Electro-Optical Characteristics Curves

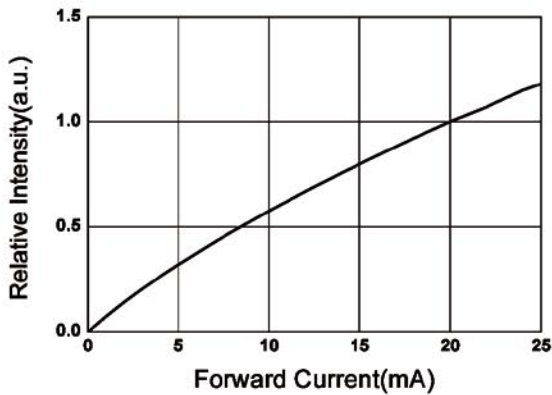
Relative Intensity vs. Wavelength



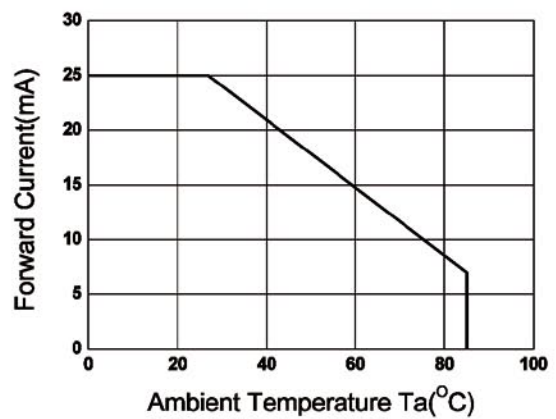
Forward Current vs. Forward Voltage



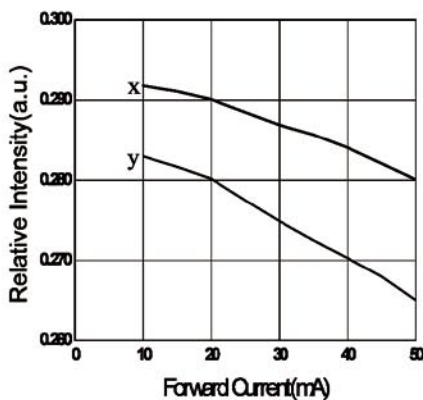
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Dispacemen

