

TOSHIBA InGaAlP LED

## TLRH30TP(F),TLRMH30TP(F),TLSH30TP(F),TLOH30TP(F),TLYH30TP(F)

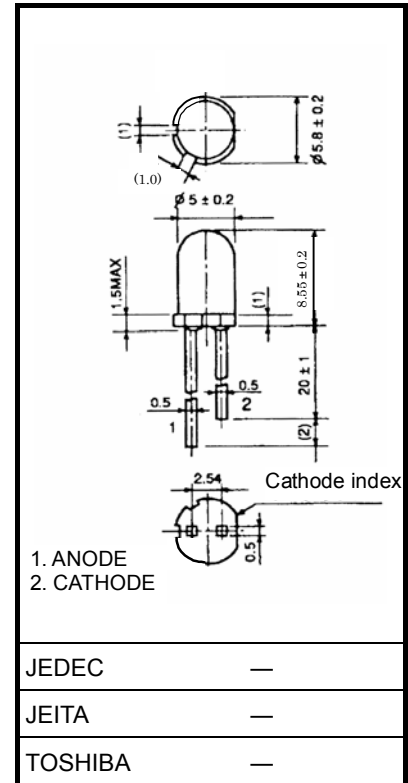
### Panel Circuit Indicator

Unit: mm

- Lead(Pb)-free products (lead: Sn-Ag-Cu)
  - 5 mm package
  - InGaAlP technology
  - All plastic mold type
  - Transparent lens
  - Lineup: 3colors (red, orange, yellow)
  - High intensity light emission
  - Excellent low current light output
  - Applications: Traffic signals, Safety equipment, Backlight
  - Stopper lead type is also available.
- TLRH30T(F) , TLRMH30T(F), TLSH30T(F), TLOH30T(F), TLYH30T(F)

### Lineup

Product Name	Color	Material
TLRH30TP(F)	Red	InGaAlP
TLRMH30TP(F)	Red	
TLSH30TP(F)	Red	
TLOH30TP(F)	Orange	
TLYH30TP(F)	Yellow	



Weight: 0.29 g

### Maximum Ratings (Ta = 25°C)

Product Name	Forward Current I <sub>F</sub> (mA)	Reverse Voltage V <sub>R</sub> (V)	Power Dissipation P <sub>D</sub> (mW)	Operating Temperature T <sub>opr</sub> (°C)	Storage Temperature T <sub>stg</sub> (°C)
TLRH30TP(F)	50	4	120	-40~100	-40~120
TLRMH30TP(F)					
TLSH30TP(F)					
TLOH30TP(F)					
TLYH30TP(F)					



For part availability and ordering information please call Toll Free: 800.984.5337  
 Website: [www.marktechopto.com](http://www.marktechopto.com) | Email: [info@marktechopto.com](mailto:info@marktechopto.com)

**Electrical and Optical Characteristics (Ta = 25°C)**

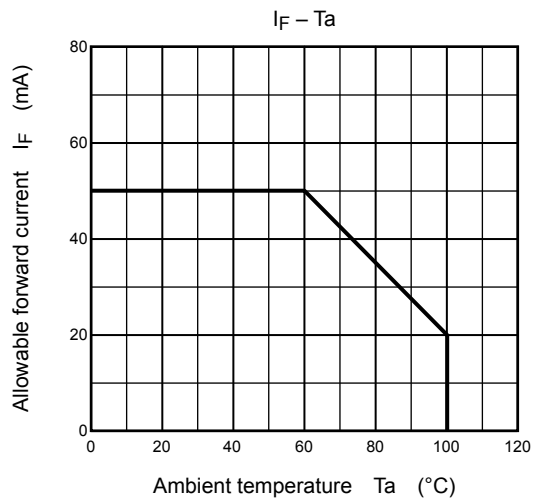
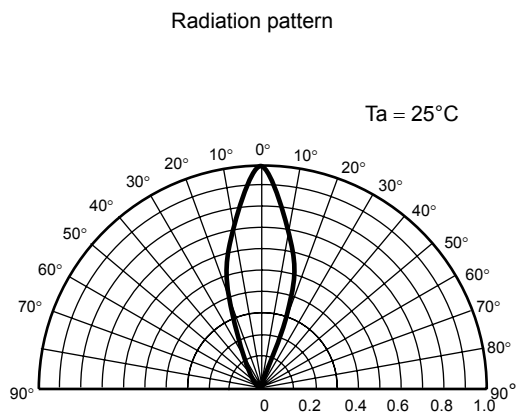
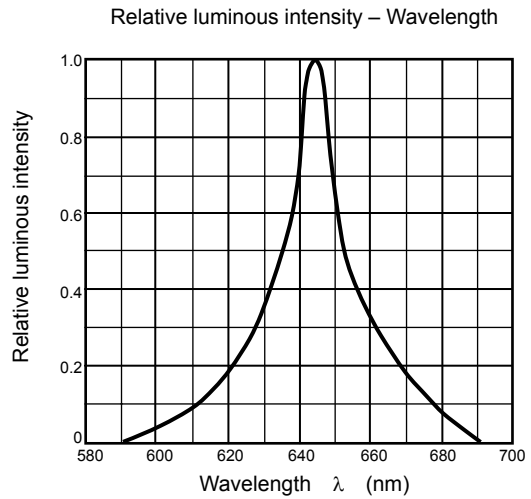
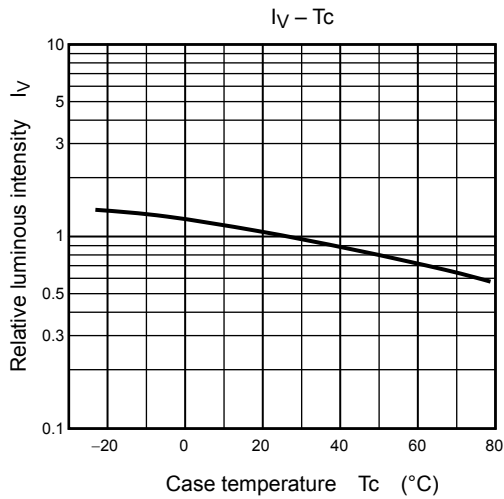
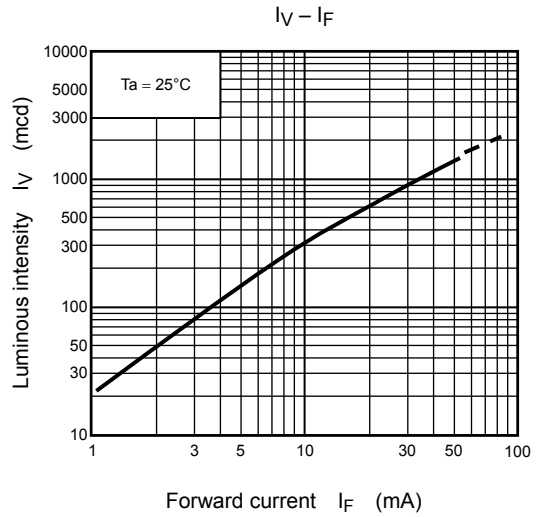
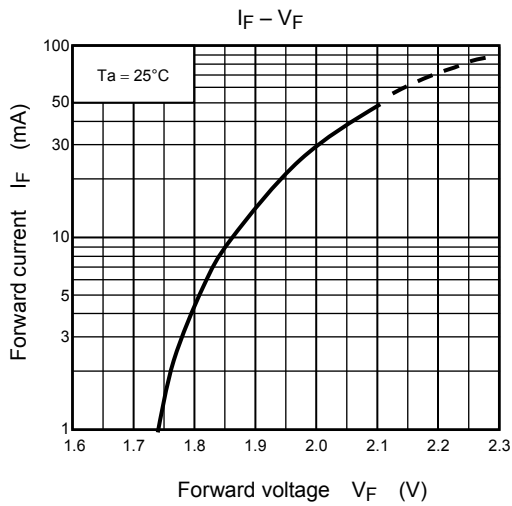
Product Name	Typ. Emission Wavelength				Luminous Intensity I <sub>V</sub>			Forward Voltage V <sub>F</sub>			Reverse Current I <sub>R</sub>	
	λ <sub>d</sub>	λ <sub>P</sub>	Δλ	I <sub>F</sub>	Min	Typ.	I <sub>F</sub>	Typ.	Max	I <sub>F</sub>	Max	V <sub>R</sub>
TLRH30TP(F)	630	(644)	13	20	272	680	20	1.9	2.4	20	50	4
TLRMH30TP(F)	626	(636)	13	20	476	950	20	1.9	2.4	20	50	4
TLSH30TP(F)	613	(623)	13	20	476	1300	20	2.0	2.4	20	50	4
TLOH30TP(F)	605	(612)	13	20	476	1600	20	2.0	2.4	20	50	4
TLYH30TP(F)	587	(590)	13	20	476	1350	20	2.0	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

**Precautions**

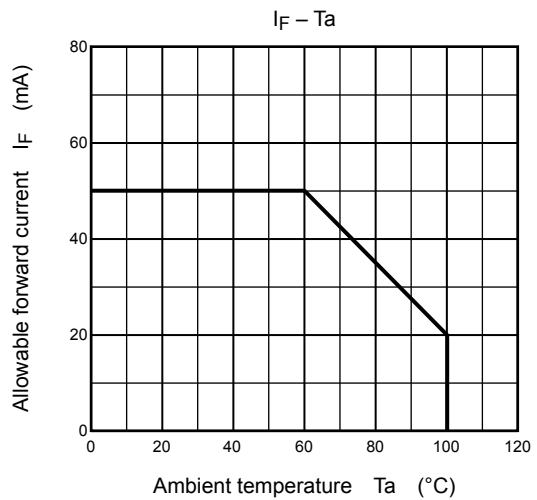
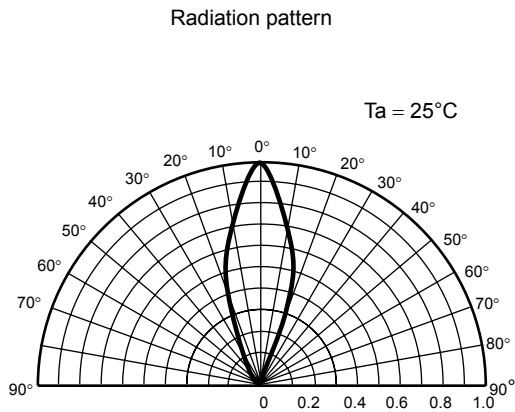
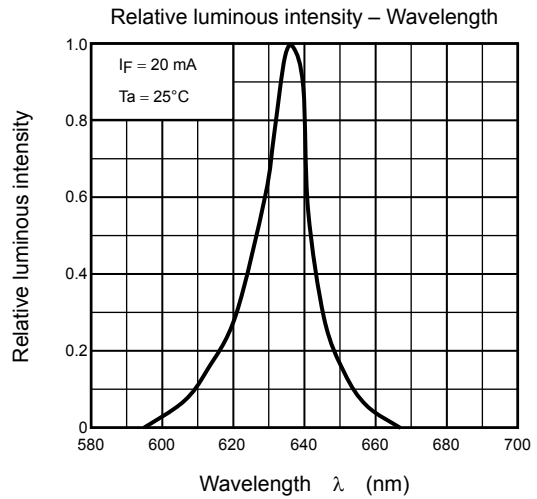
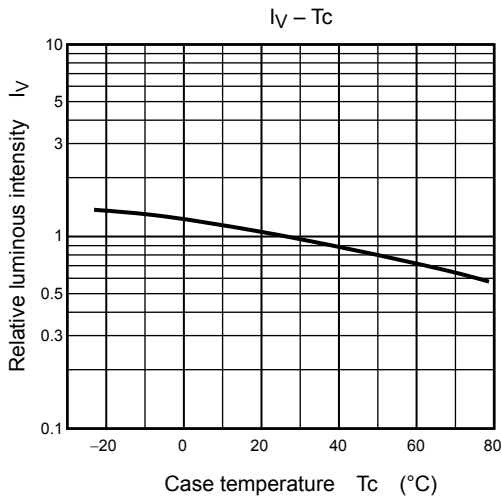
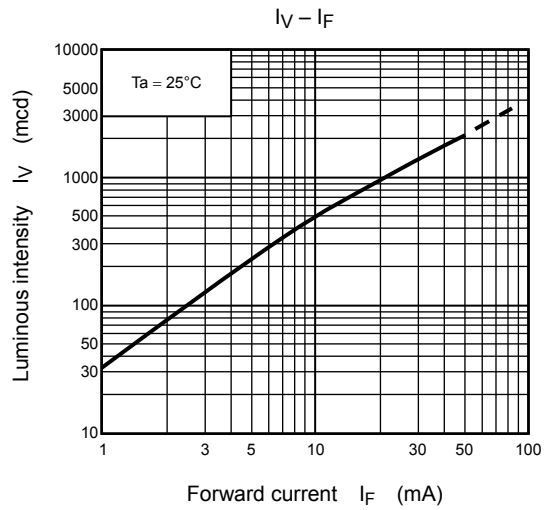
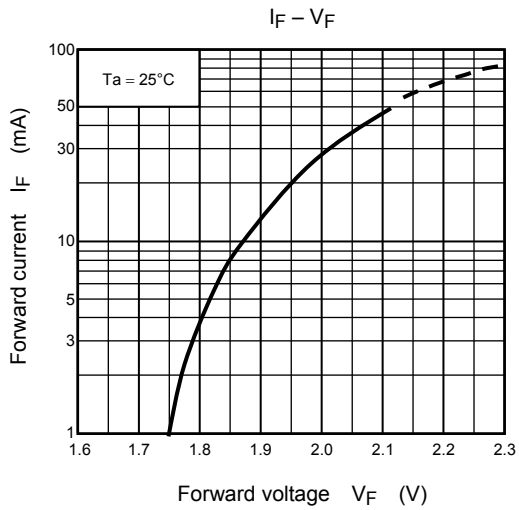
Please be careful of the following:

- Soldering temperature: 260°C max, soldering time: 3 s max  
(Soldering portion of lead: up to 1.6 mm from the body of the device)
- If the lead is formed, the lead should be formed up to 1.6 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible LED lamp also emits some IR light.  
If a photodetector is located near the LED lamp, please ensure that it will not be affected by this IR light.

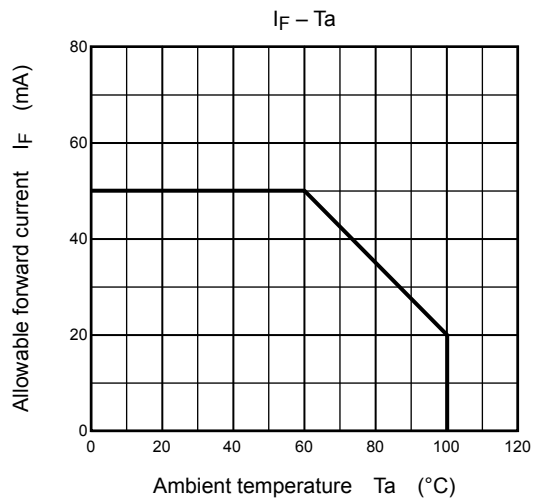
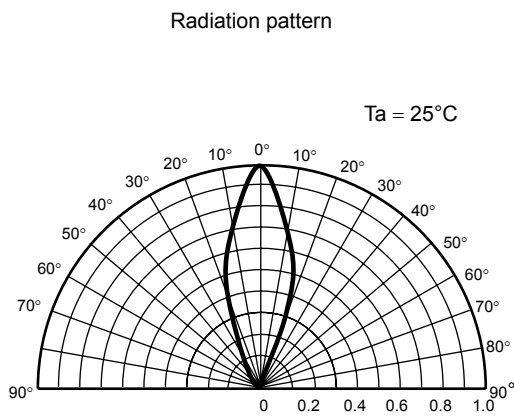
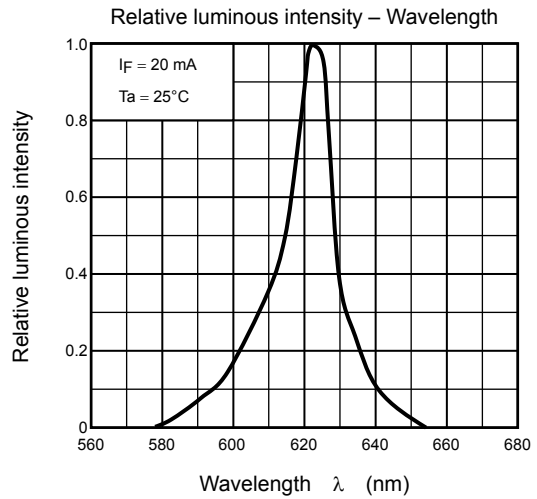
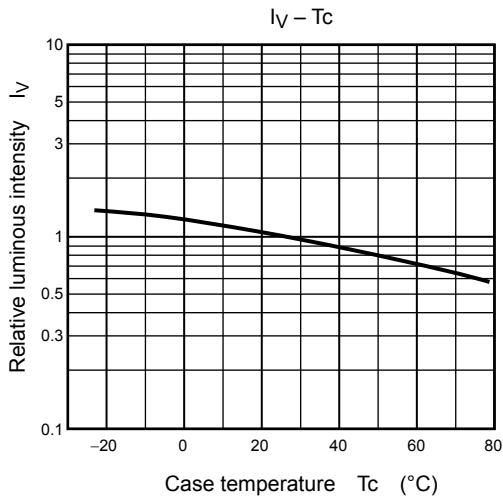
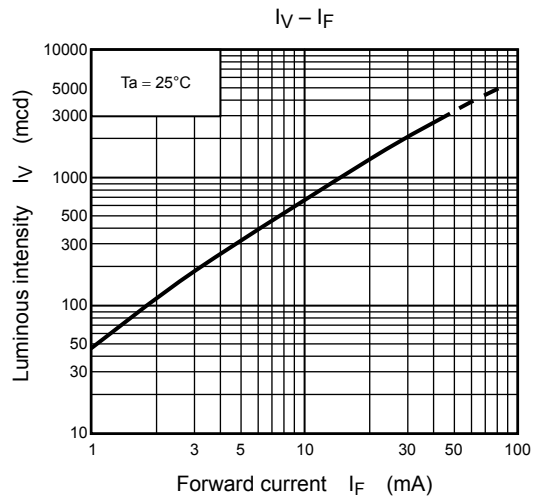
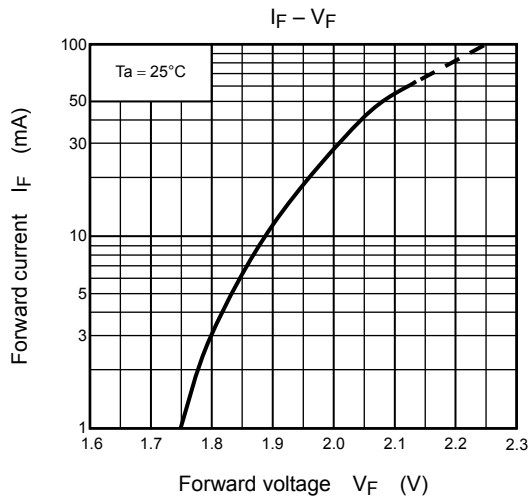
**TLRH30TP(F)**



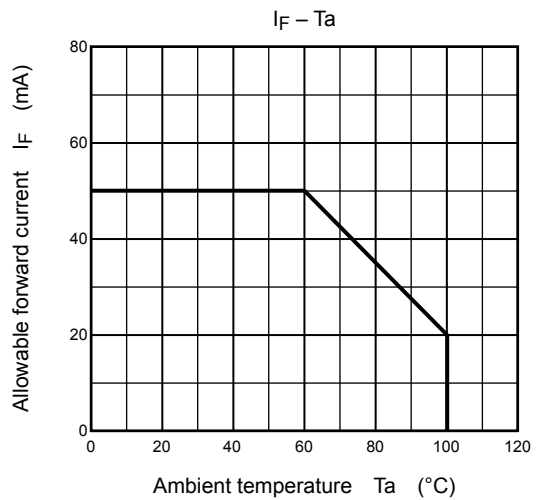
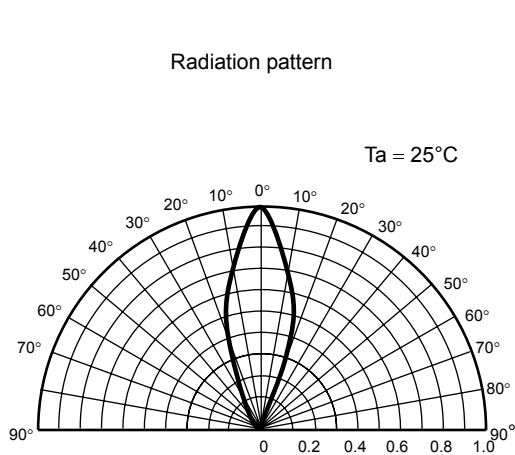
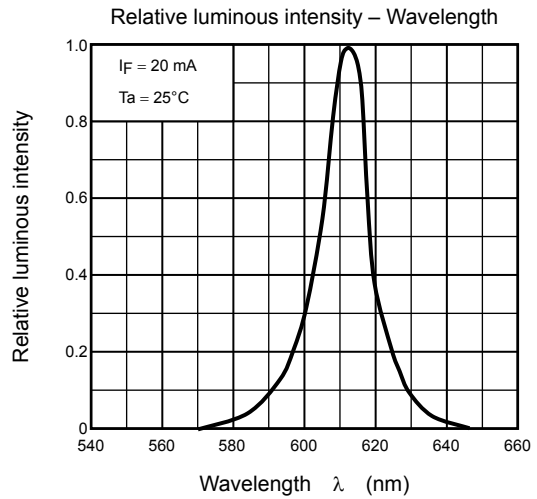
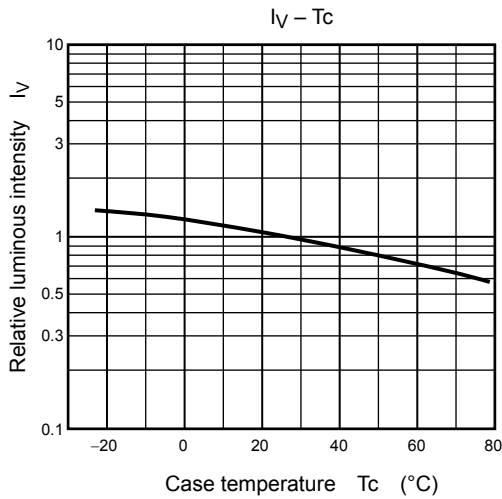
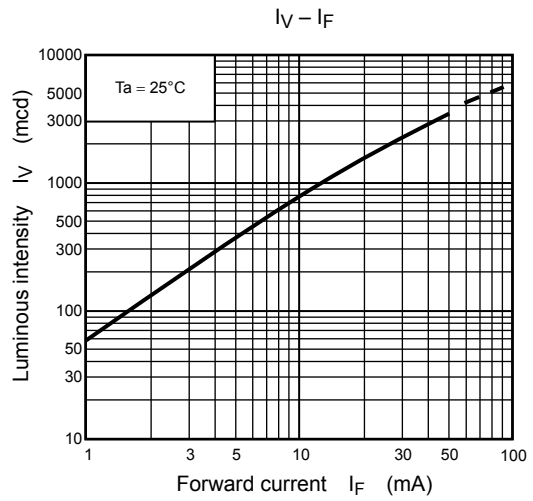
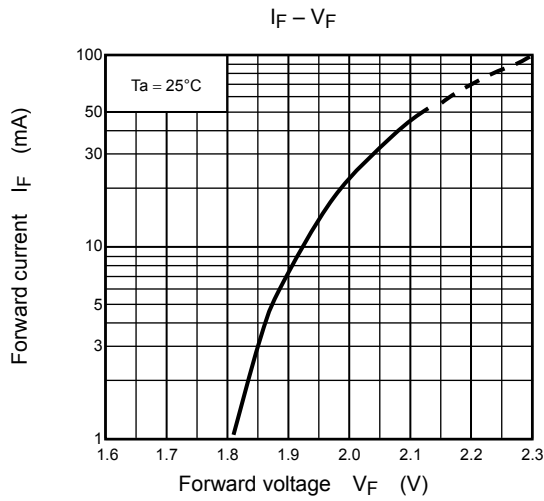
**TLRMH30TP(F)**



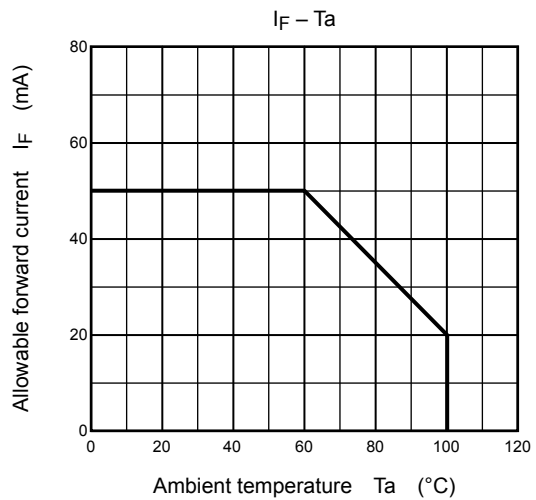
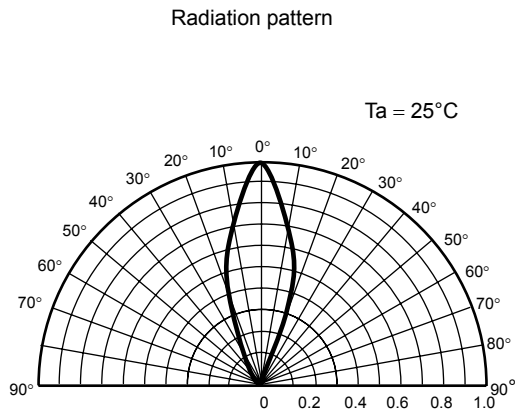
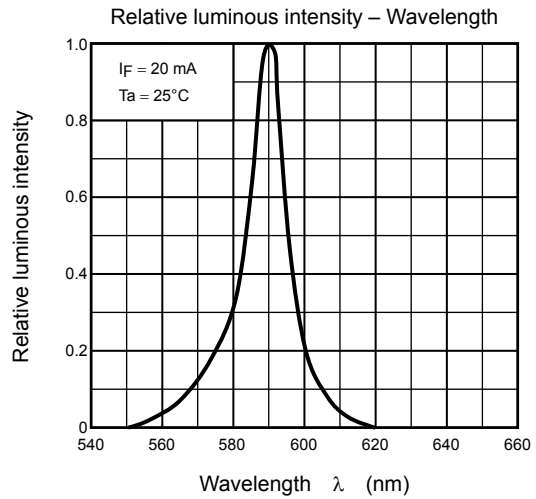
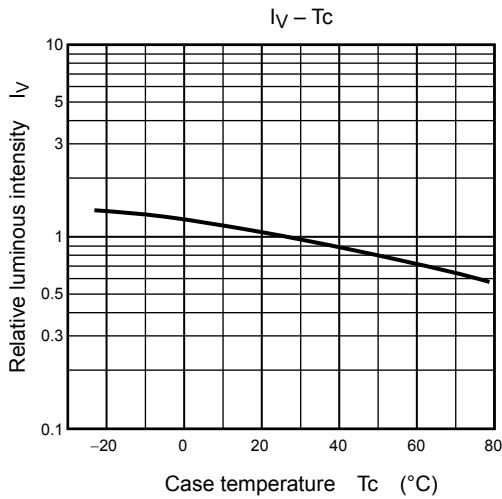
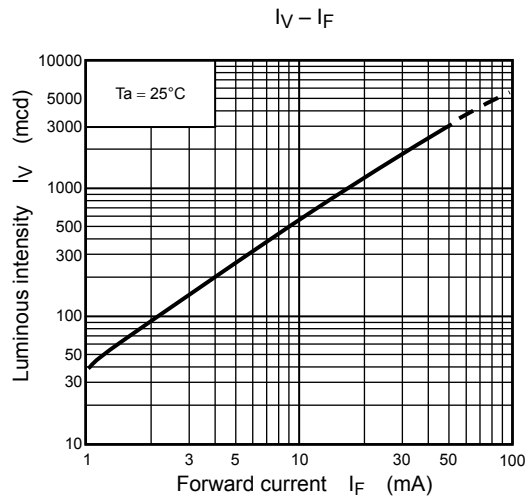
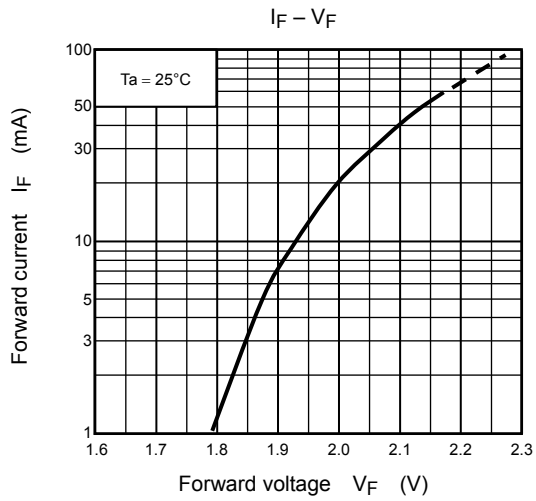
**TLSH30TP(F)**



**TLOH30TP(F)**



**TLYH30TP(F)**



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