

TOSHIBA LED Lamp

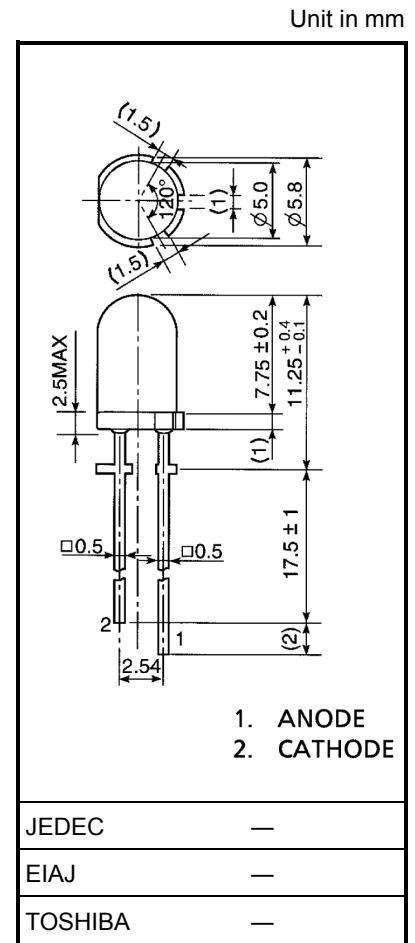
## TLRE16T, TLRME16T, TLSE16T TLOE16T, TLYE16T

### Panel Circuit Indicator

- 5mm package
- InGaAlP technology
- All plastic mold type
- Transparent lens
- High intensity light emission
- Excellent low current light output
- Applications: outdoor message signboards, safety equipment

### Line-Up

Product Name	Color	Material
TLRE16T	Red	InGaAlP
TLRME16T	Red	InGaAlP
TLSE16T	Red	InGaAlP
TLOE16T	Orange	InGaAlP
TLYE16T	Yellow	InGaAlP



### Maximum Ratings (Ta = 25°C)

Weight: 0.31 g

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)
TLRE16T	50	4	120	-40~100	-40~120
TLRME16T	50	4	120		
TLSE16T	50	4	120		
TLOE16T	50	4	120		
TLYE16T	50	4	120		

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

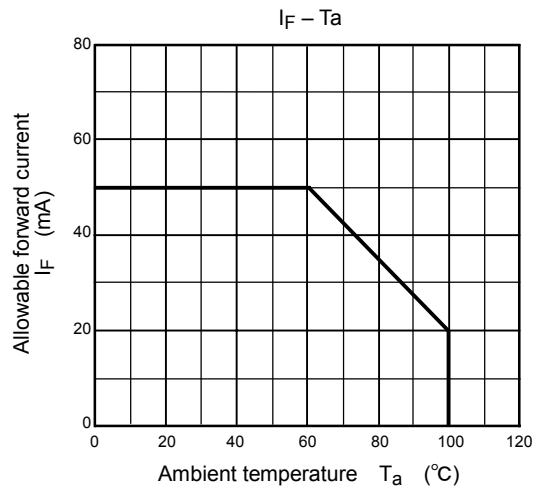
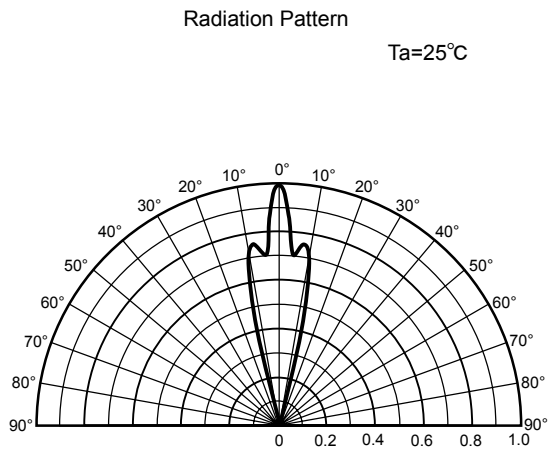
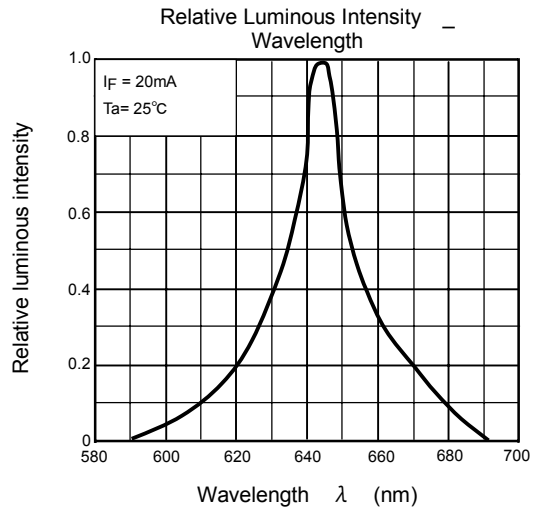
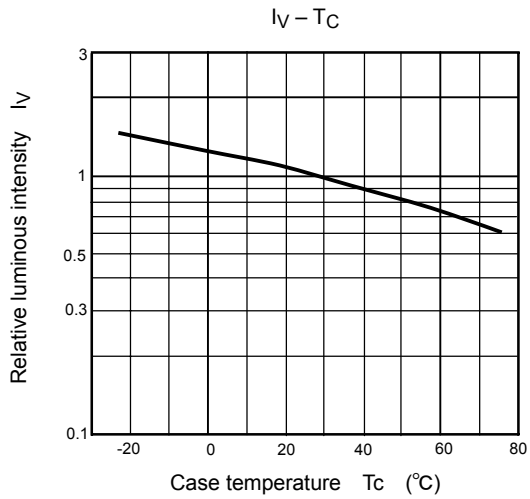
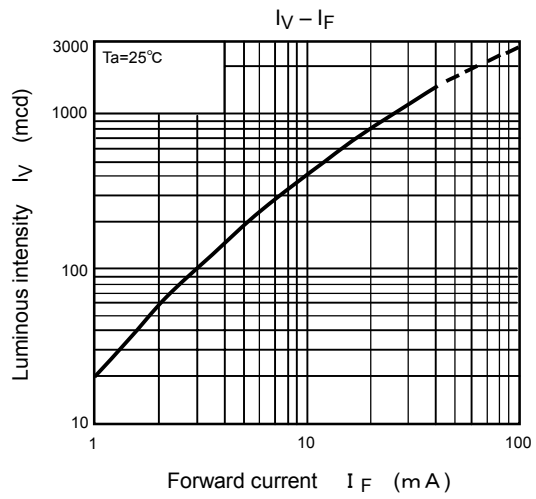
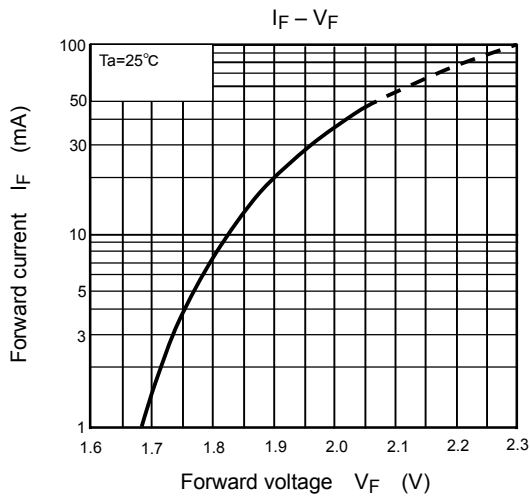
Product Name	Typ. Emission Wavelength				Luminous Intensity I <sub>v</sub>			Forward Voltage V <sub>F</sub>			Reverse Current I <sub>R</sub>	
	λ <sub>d</sub>	λ <sub>p</sub>	Δλ	I <sub>F</sub>	Min	Typ.	I <sub>F</sub>	Typ.	Max	I <sub>F</sub>	Max	V <sub>R</sub>
TLRE16T	630	(644)	20	20	272	800	20	1.9	2.4	20	50	4
TLRME16T	626	(636)	23	20	272	1200	20	1.9	2.4	20	50	4
TLSE16T	613	(623)	20	20	476	1500	20	1.9	2.4	20	50	4
TLOE16T	605	(612)	20	20	850	2000	20	2.0	2.4	20	50	4
TLYE16T	587	(590)	17	20	476	1500	20	2.0	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

**Precautions**

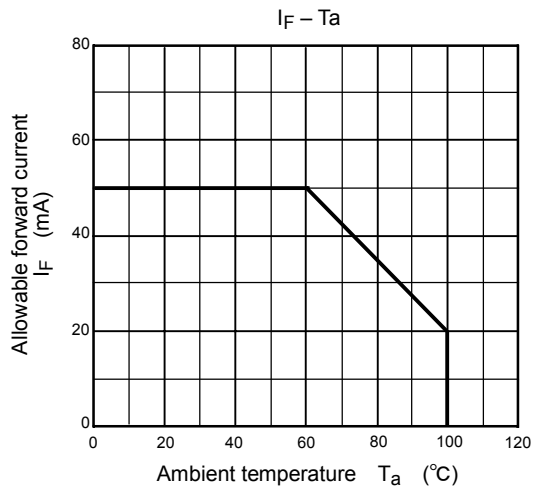
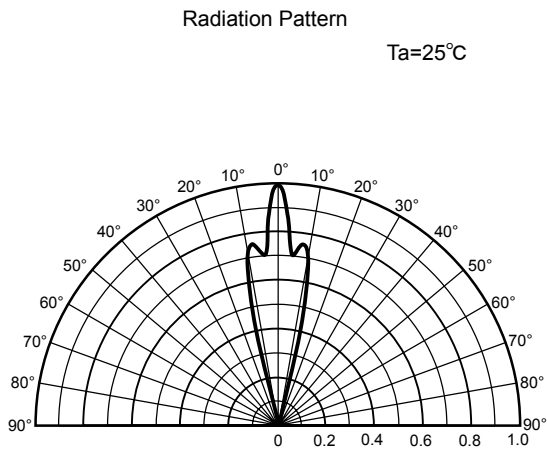
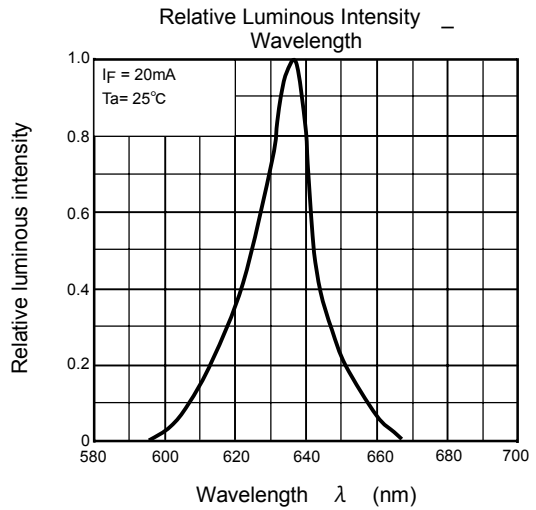
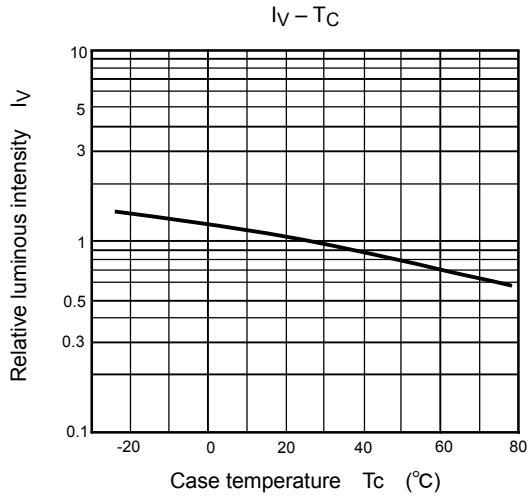
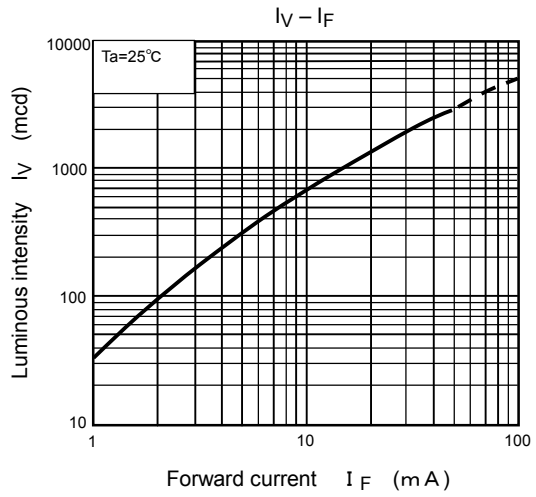
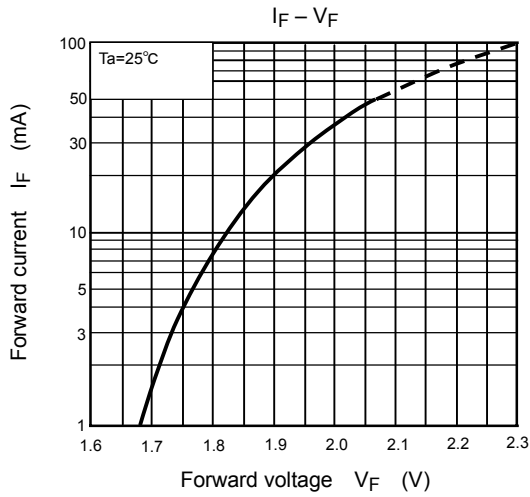
Please be careful of the following:

- Soldering temperature: 260°C max, soldering time: 3 s max  
(soldering portion of lead: below the lead stopper)
- If the lead is formed, the lead should be formed up to 5 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.

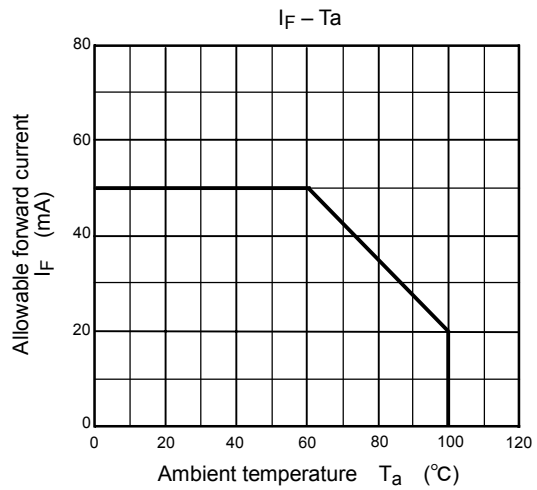
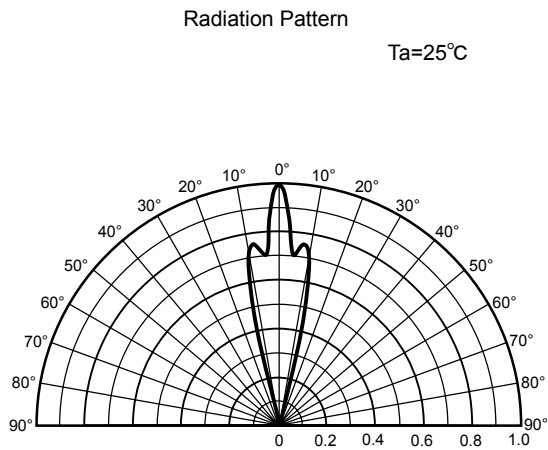
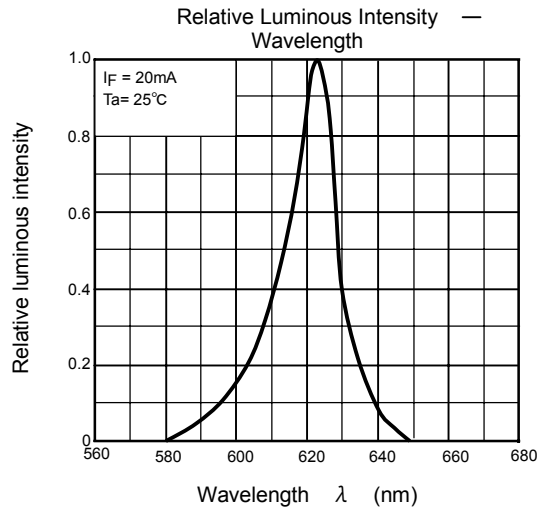
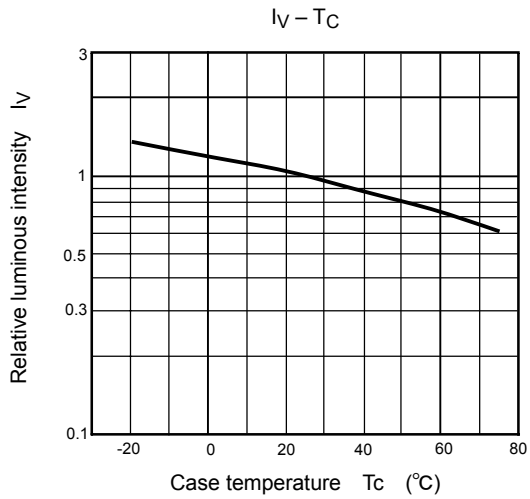
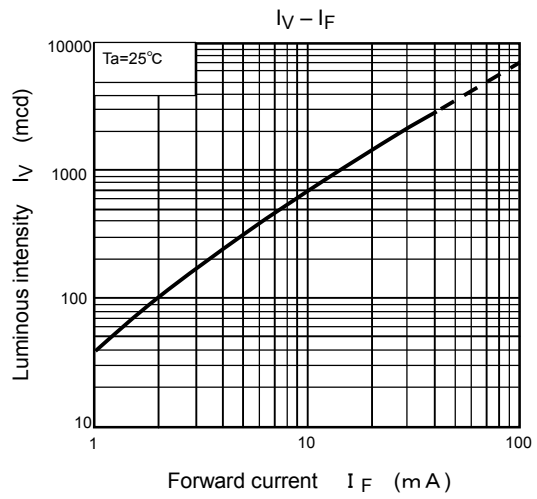
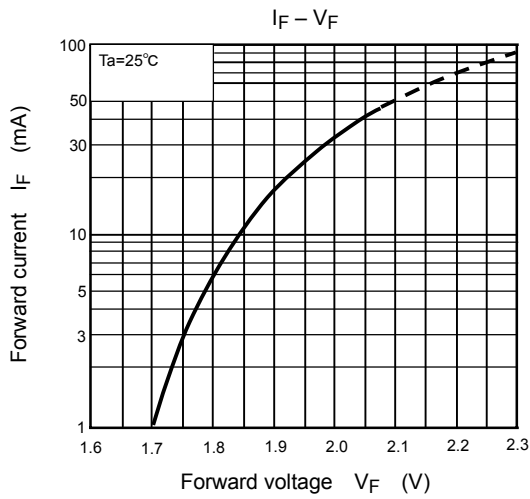
TLRE16T



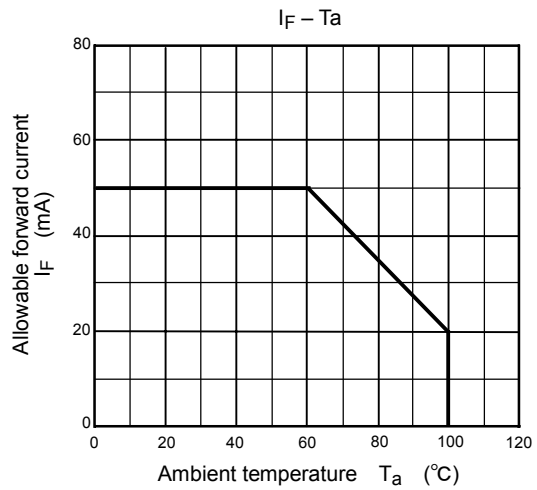
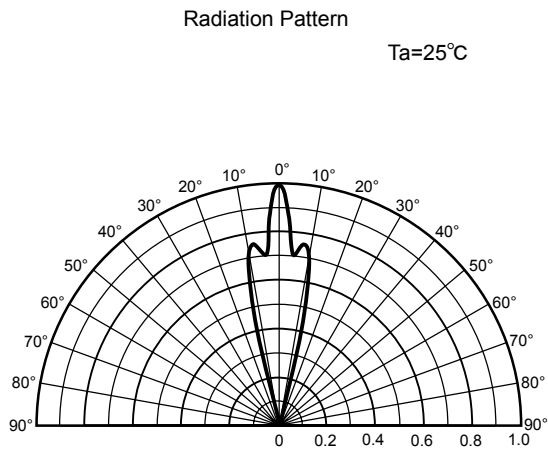
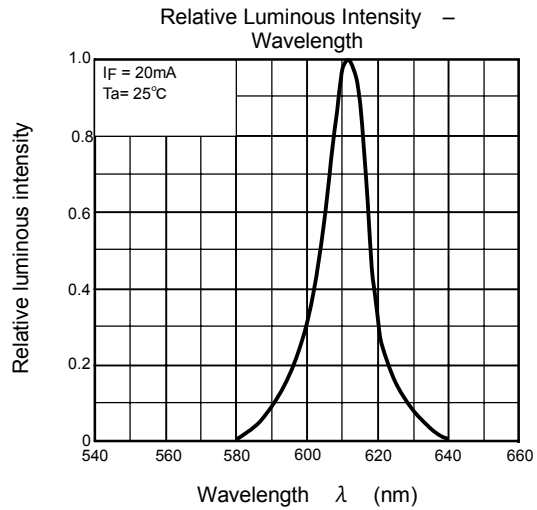
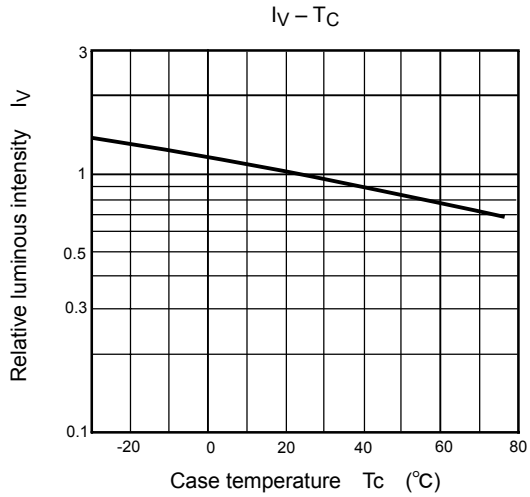
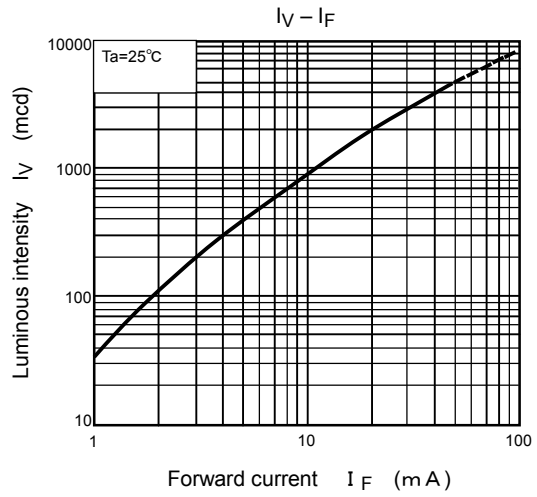
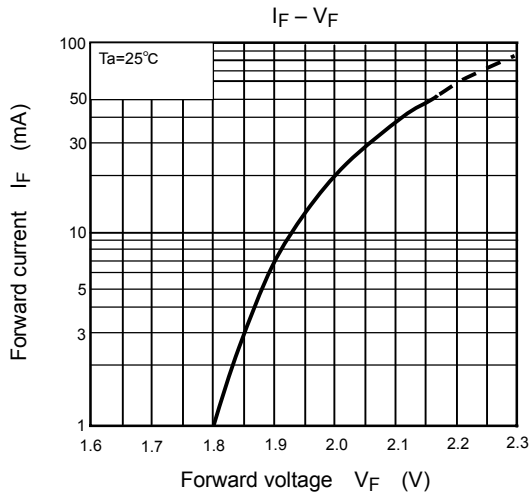
TLRME16T



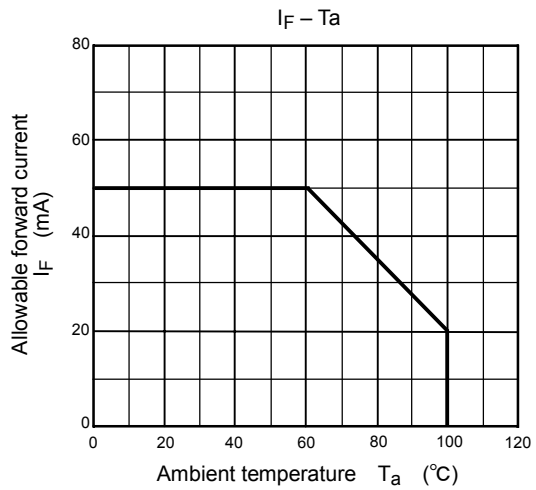
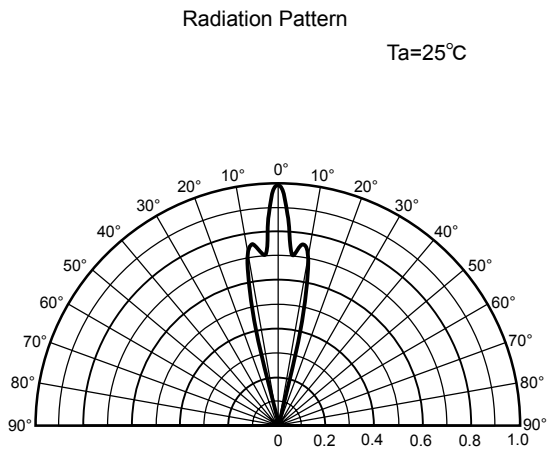
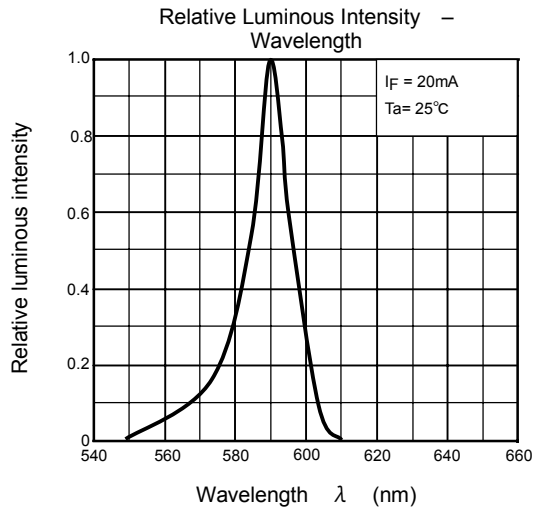
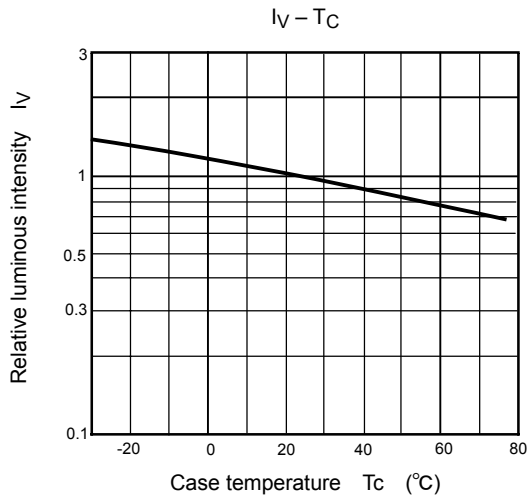
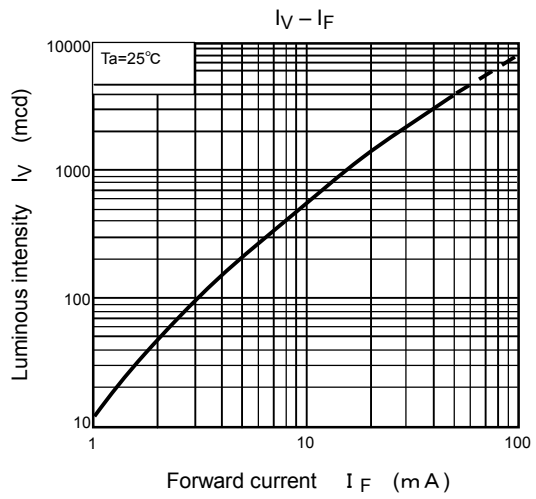
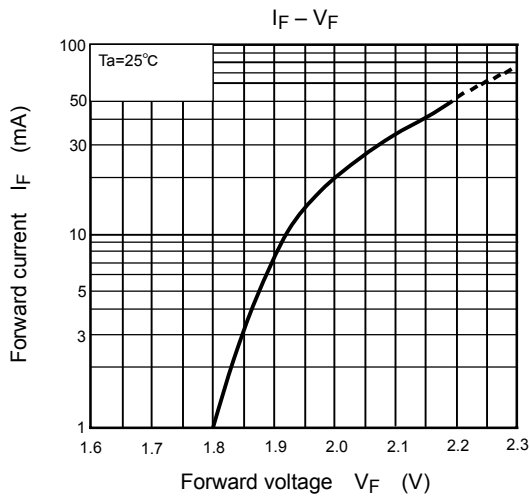
TLSE16T



TLOE16T



TLYE16T



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