

TOSHIBA LED Lamp

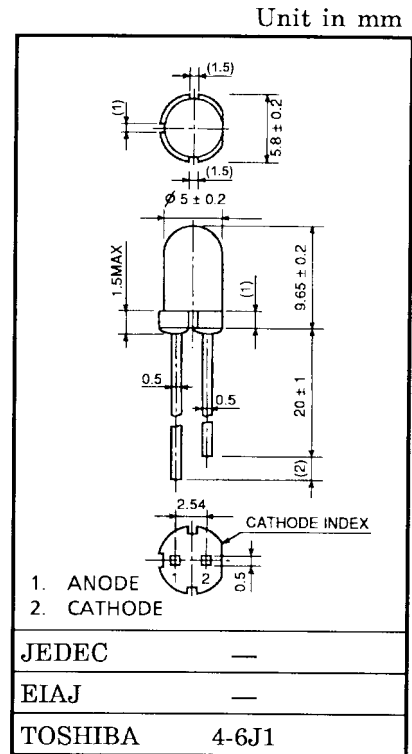
TLRE20TP,TLRME20TP,TLSE20TP,TLOE20TP,TLYE20TP

Panel Circuit Indicator

- 5 mm package
- InGaA/P technology
- All plastic mold type
- Transparent lens
- High intensity light emission
- Excellent low current light output
- Applications:
outdoor message signboards, safety equipment, automotive use, etc

Line-Up

Product Name	Color	Material
TLRE20TP	Red	InGaA/P
TLRME20TP	Red	
TLSE20TP	Red	
TLOE20TP	Orange	
TLYE20TP	Yellow	



Weight : 0.31 g

Maximum Ratings (Ta = 25°C)

Product Name	Forward Current I _F (mA)	Reverse Voltage V _R (V)	Power Dissipation P _D (mW)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)
TLRE20TP	50	4	120	-40~100	-40~120
TLRME20TP	50	4	120		
TLSE20TP	50	4	120		
TLOE20TP	50	4	120		
TLYE20TP	50	4	120		

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Electrical and Optical Characteristics (Ta = 25°C)

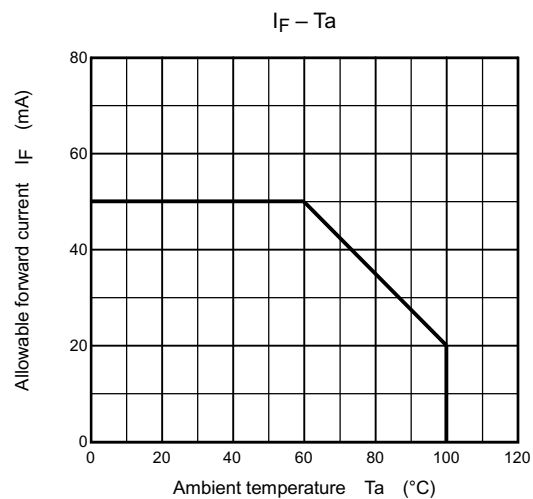
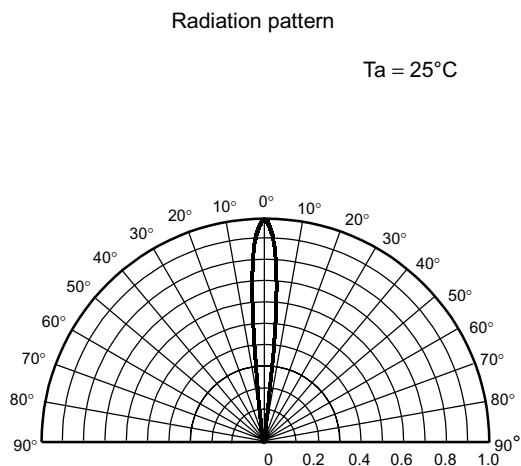
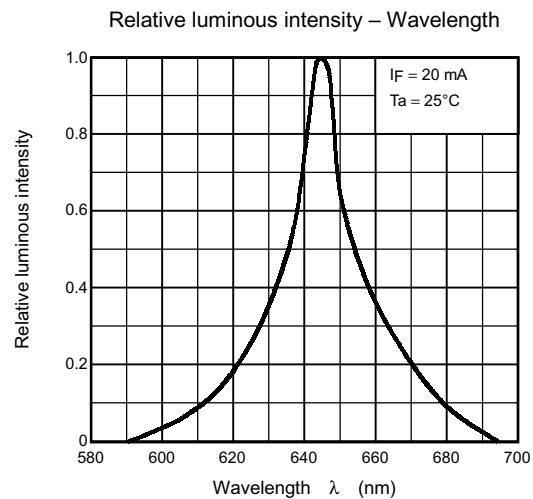
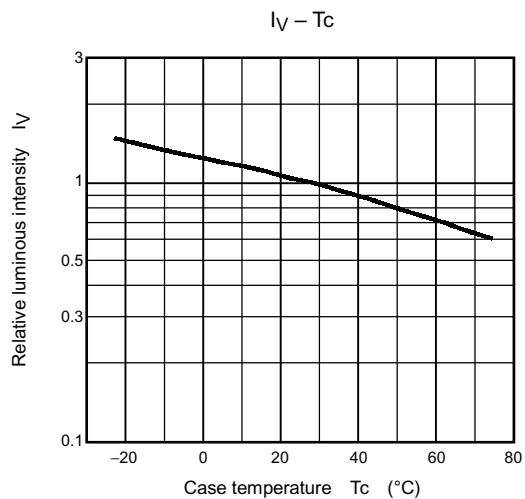
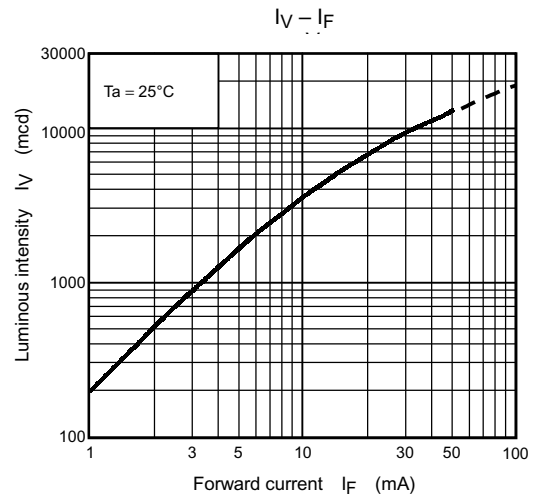
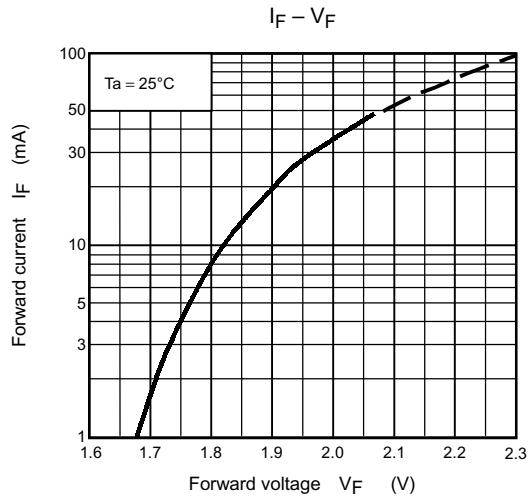
Product Name	Typ. Emission Wavelength				Luminous Intensity I _V			Forward Voltage V _F			Reverse Current I _R	
	λ _d	λ _p	Δλ	I _F	Min	Typ.	I _F	Typ.	Max	I _F	Max	V _R
TLRE20TP	630	(644)	20	20	2720	7000	20	1.9	2.4	20	50	4
TLRME20TP	626	(636)	23	20	2720	8000	20	1.9	2.4	20	50	4
TLSE20TP	613	(623)	20	20	2720	9000	20	1.9	2.4	20	50	4
TLOE20TP	605	(612)	20	20	4760	10000	20	2.0	2.4	20	50	4
TLYE20TP	587	(590)	17	20	2720	9500	20	2.0	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

Precautions

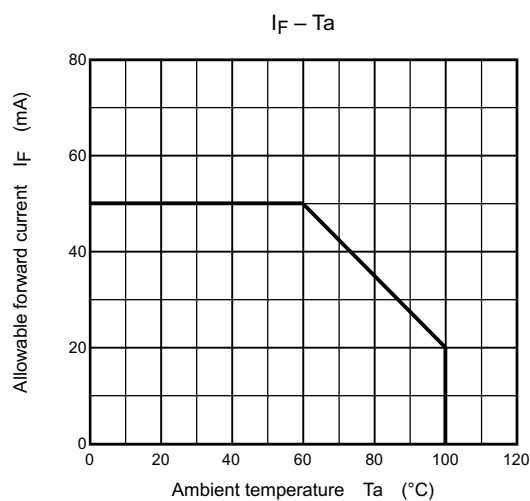
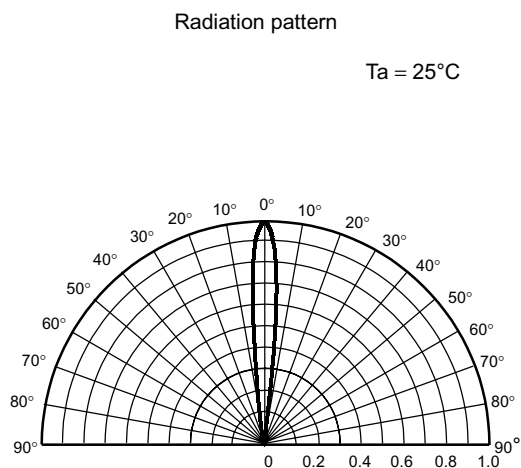
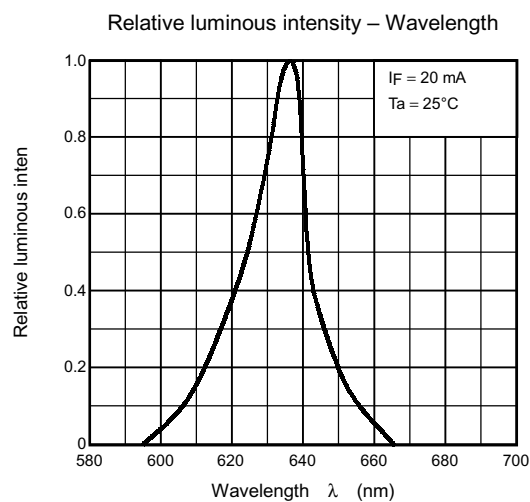
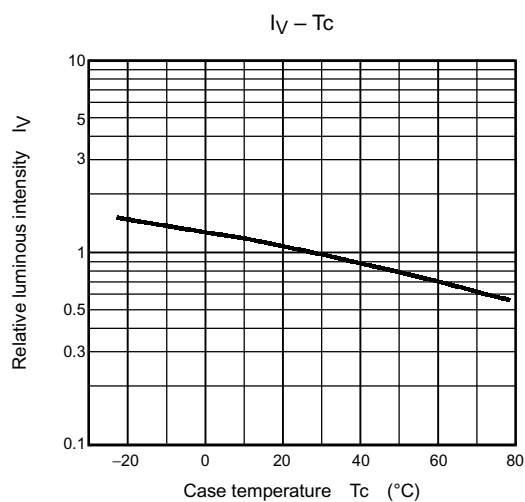
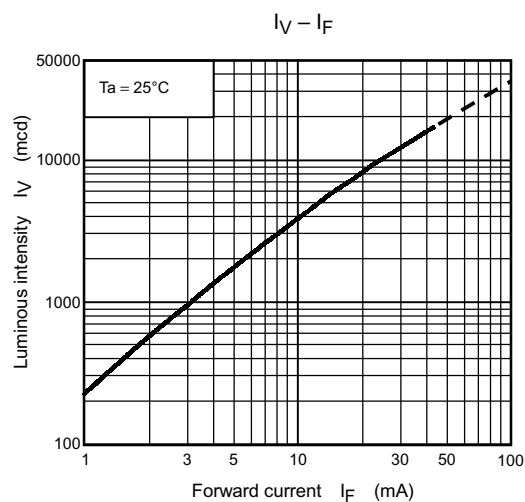
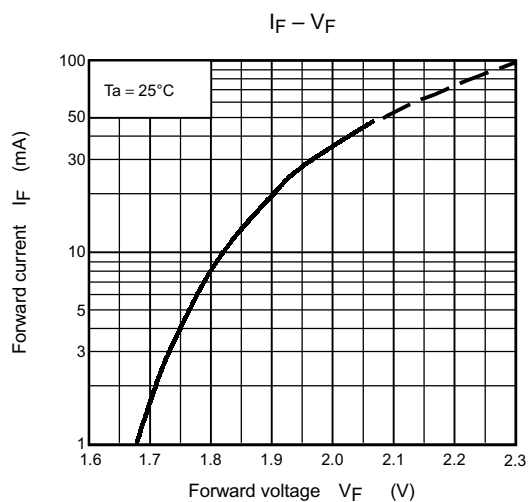
Please be careful of the following:

- Soldering temperature: 260°C max, soldering time: 3 s max
(soldering portion of lead: up to 2 mm from the body of the device)
- 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.

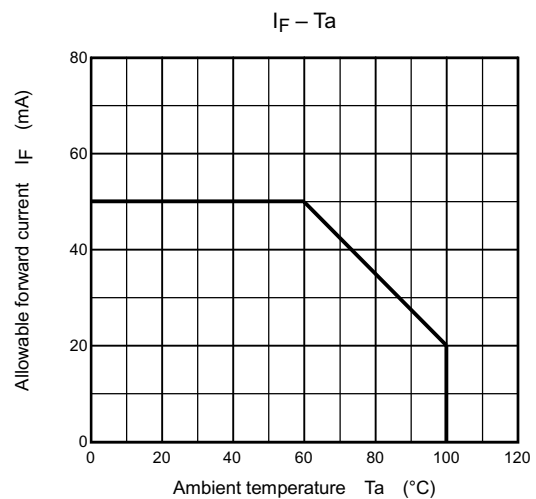
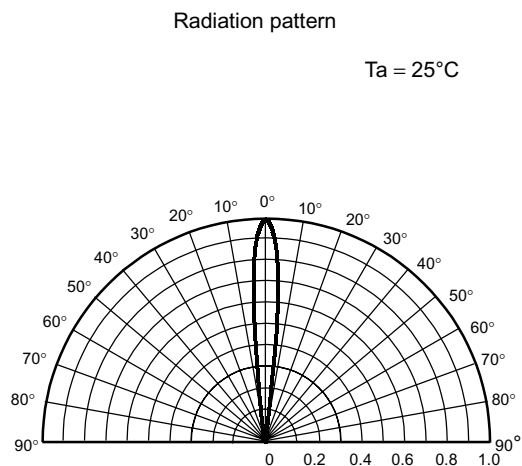
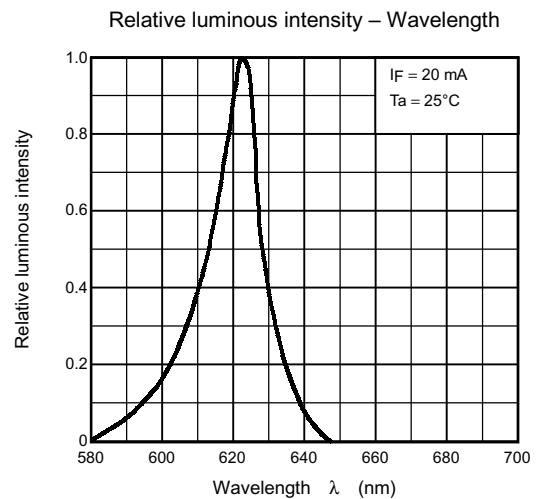
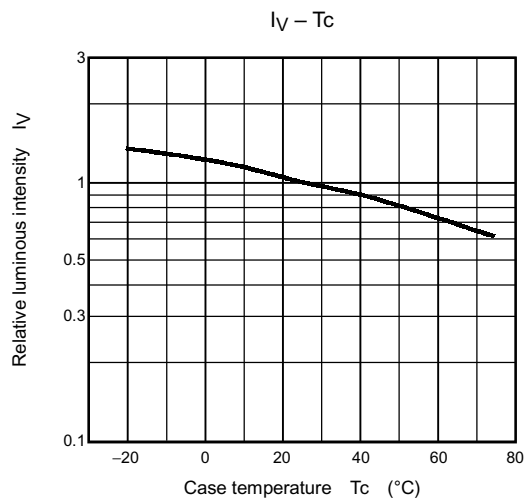
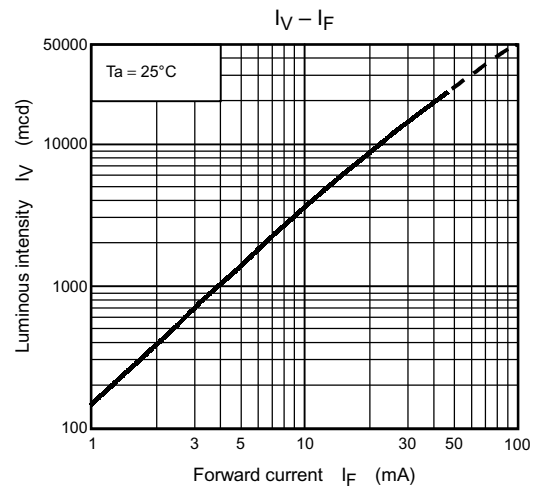
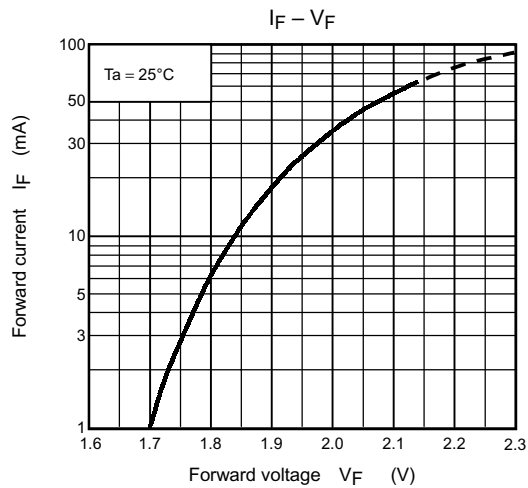
TLRE20TP



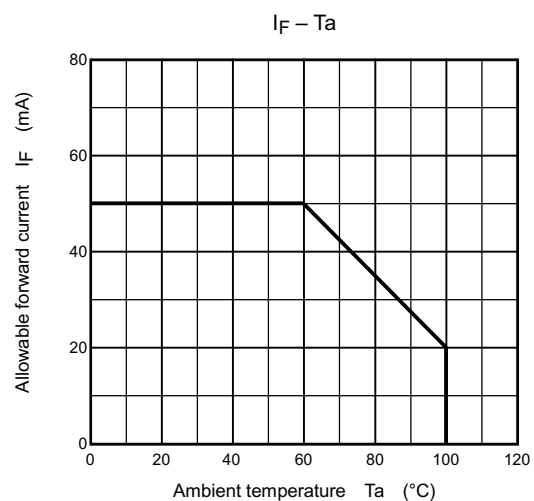
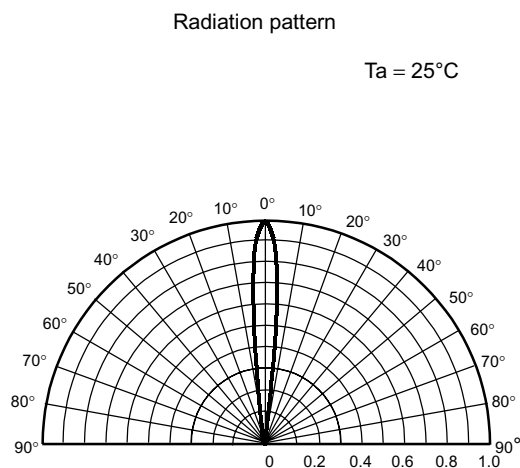
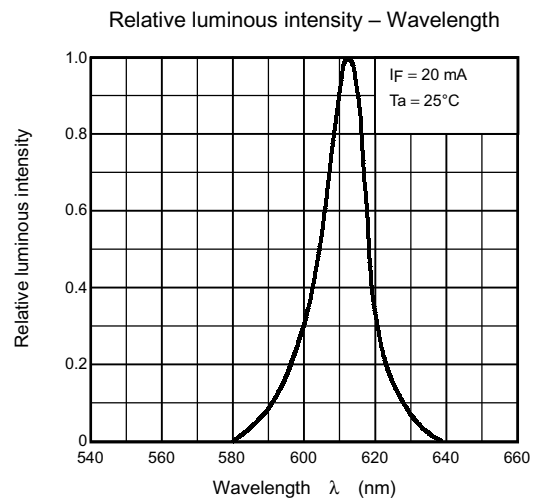
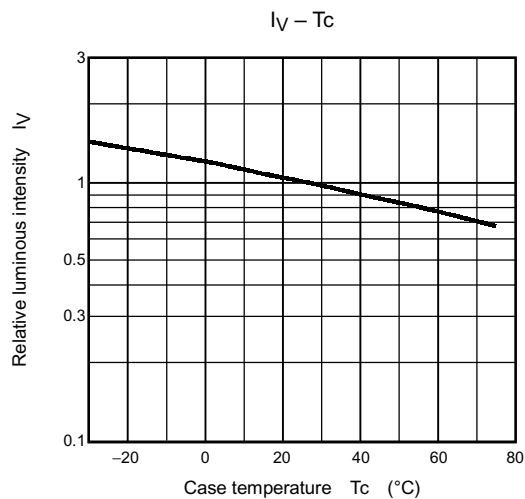
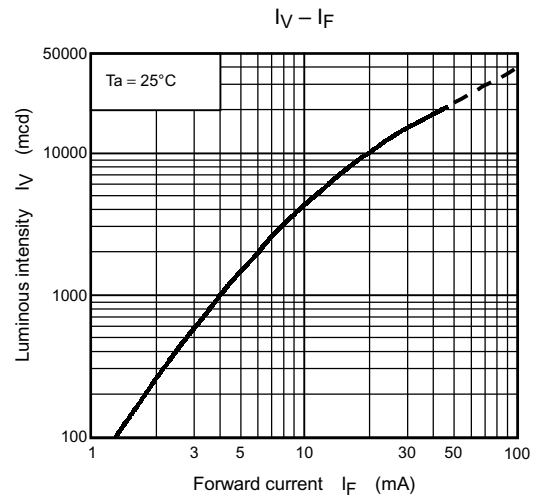
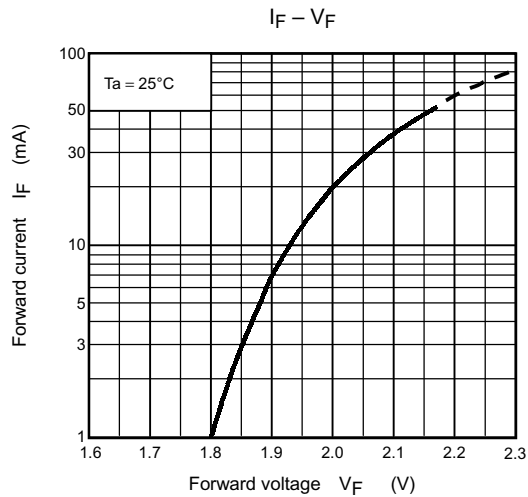
TLRME20TP



TLSE20TP



TLOE20TP



TLYE20TP

