

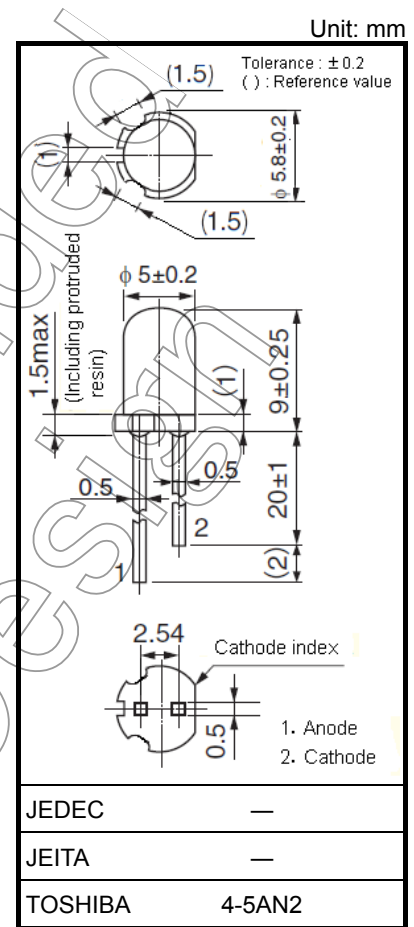
# TLGU18TP(F), TLGU18CP(F), TLPGU18TP(F)

○ Panel Circuit Indicator

- $\phi$  5mm package
- InGaAlP technology
- All plastic mold type
  - TLGU18TP(F) : Transparent lens
  - TLGU18CP(F) : Colored, Transparent lens
  - TLPGU18TP(F) : Transparent lens
- Colors: Green, Pure green
- High intensity light emission
- Excellent low current light output
- Applications: Various types of information panels, indicators for panel backlightings, etc.
- Stopper leads type is also available.  
 TLGU18T(F), TLGU18C(F), TLPGU18T(F)

**Lineup**

Product Name	Color	Material
TLGU18TP(F)	Green	InGaAlP
TLGU18CP(F)	Green	
TLPGU18TP(F)	Pure Green	



Weight: 0.31 g (Typ.)

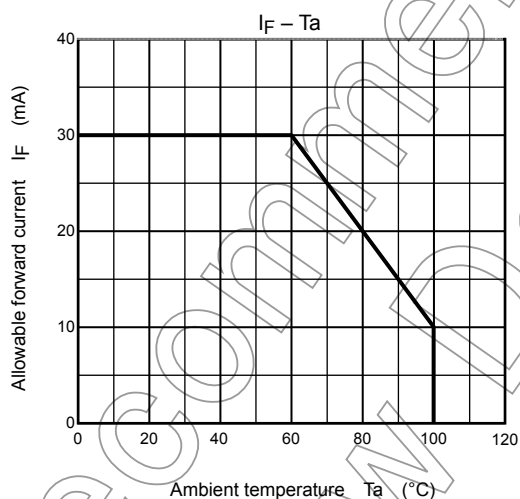
### Absolute Maximum Ratings (Ta = 25°C)

Product Name	Forward Current I <sub>F</sub> (mA) (Note 1)	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)
TLGU18TP(F)	30	4	72	-40 to 100	-40 to 120
TLGU18CP(F)	30	4	72		
TLPGU18TP(F)	30	4	72		

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Note 1: Forward current derating



## 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>
TLGU18TP(F)	571	574	17	20	85.0	200	20	2.1	2.4	20	50	4
TLGU18CP(F)	571	574	17	20	47.6	180	20	2.1	2.4	20	50	4
TLPGU18TP(F)	558	562	14	20	27.2	90	20	2.1	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

## Precautions

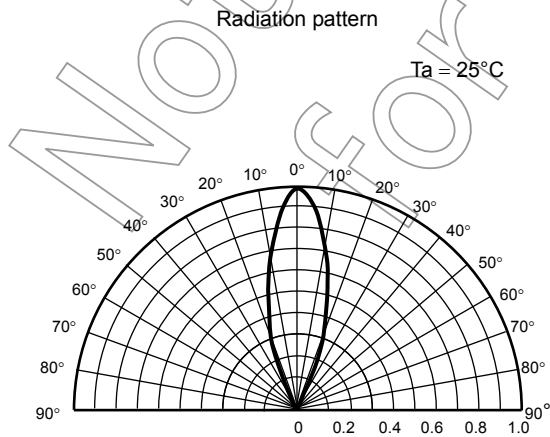
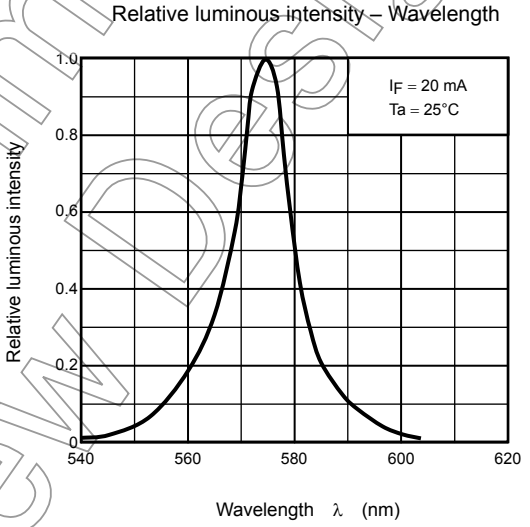
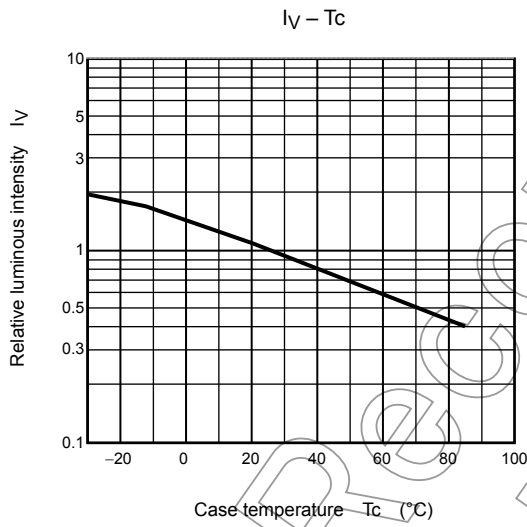
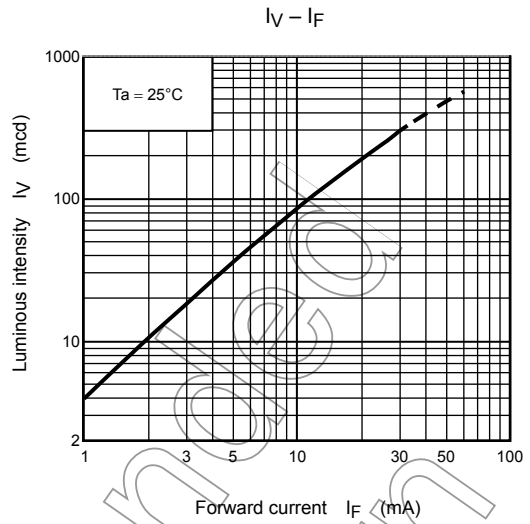
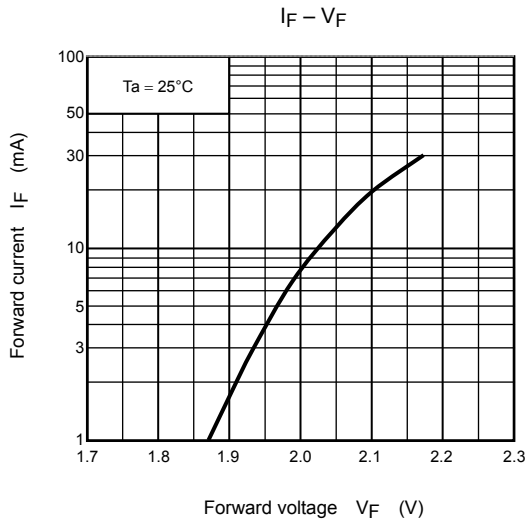
Please be careful of the following:

- 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 photo detector is located near the LED lamp, please ensure that it will not be affected by this IR light.

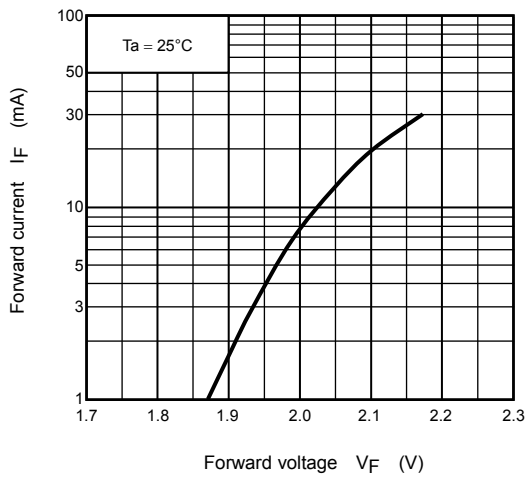
Not Recommended for New Design

**TLGU18TP(F)**

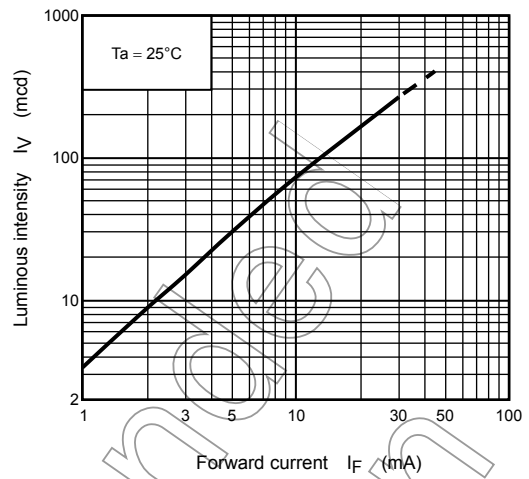


### TLGU18CP(F)

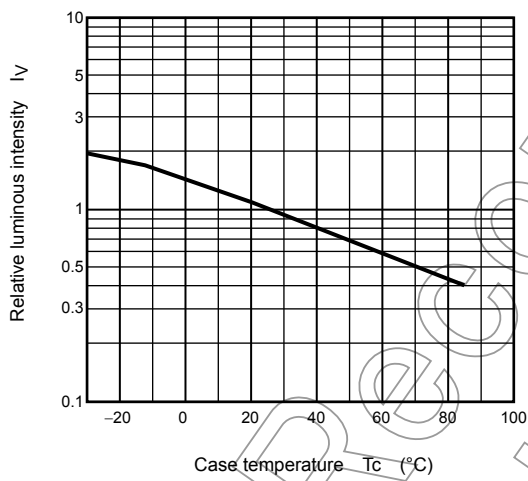
$I_F - V_F$



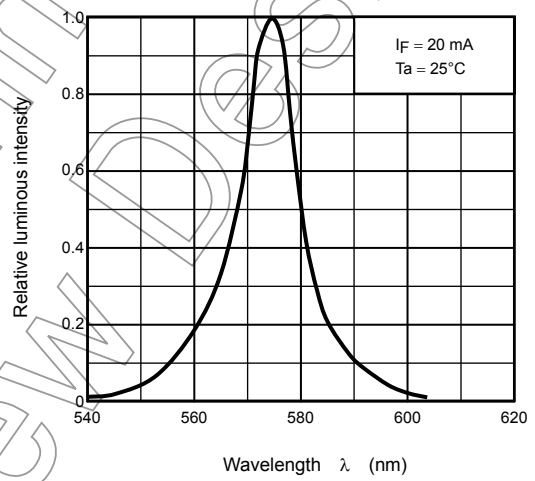
$I_V - I_F$



$I_V - T_c$

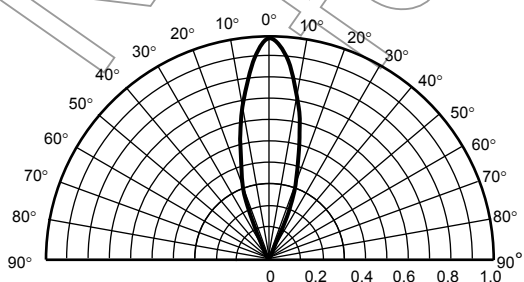


Relative luminous intensity - Wavelength



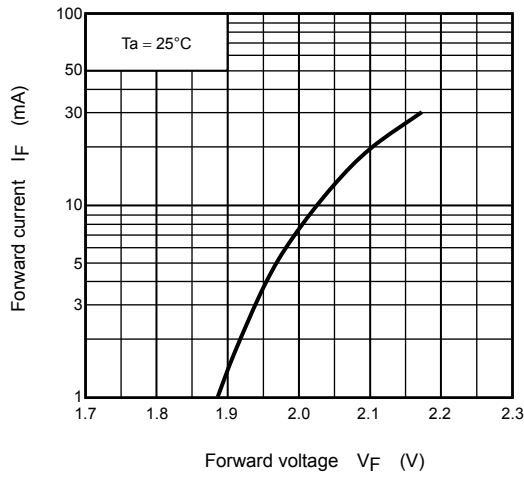
Radiation pattern

$T_a = 25^\circ\text{C}$

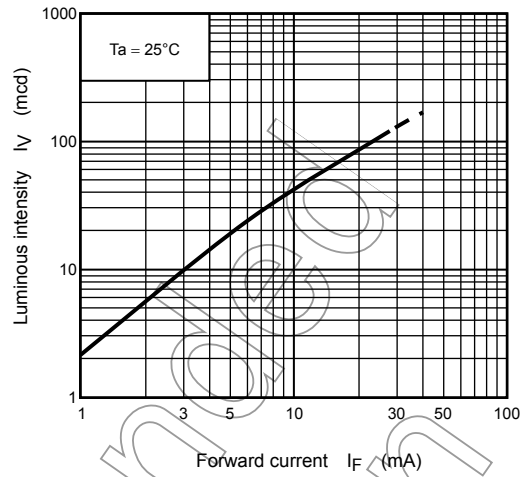


### TLPGU18TP(F)

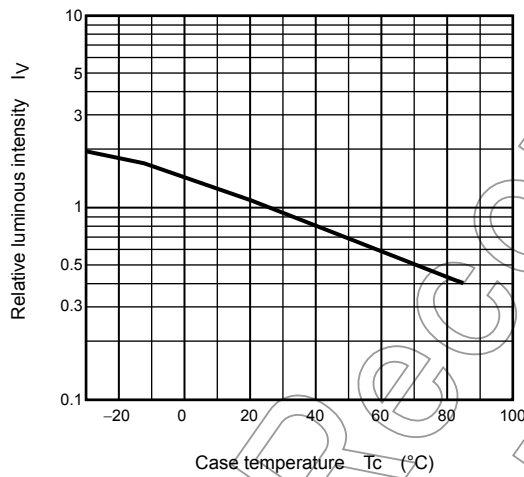
$I_F - V_F$



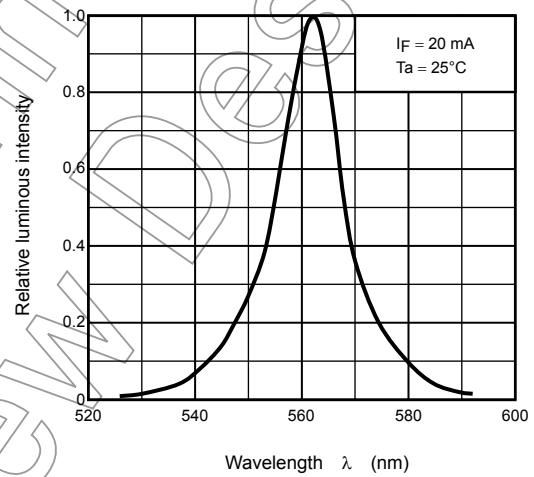
$I_V - I_F$



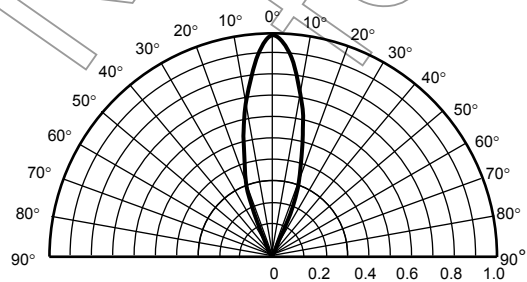
$I_V - T_c$



Relative luminous intensity - Wavelength



Radiation pattern



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