TOSHIBA InGaAℓP LED

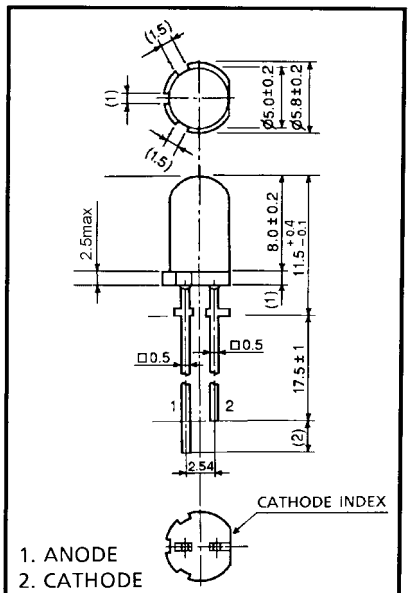
TLPGE18T, TLFGE18T, TLGE18T, TLPYE18T

Panel Circuit Indicator

- Outdoor Message Signboards, Safety Equipment, Backlight, etc.

- 5 mm package
- InGaAℓP technology
- All plastic mold type
- Transparent lens
- Line-up: 3 colors (pure green, green, pure yellow)
- High intensity light emission
- Excellent low current light output
- Straight lead type is also available
  TLPGE18TP, TLFGE18TP, TLGE18TP, TLPYE18TP

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	

Weight : 0.31 g

Line-up

Product Name	Color	Material
TLPGE18T	Pure Green	InGaAℓP
TLFGE18T	Green	
TLGE18T	Green	
TLPYE18T	Pure Yellow	

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)
TLPGE18T	50	4	120	−40~100	−40~120
TLFGE18T	50	4	120		
TLGE18T	50	4	120		
TLPYE18T	50	4	120		

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- The information contained herein is subject to change without notice.

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	$\Delta\lambda$	I_F	Min	Typ.	I_F	Typ.	Max	I_F	Max	V_R
TLPGE18T	558	(562)	14	20	85	200	20	2.1	2.4	20	50	4
TLFGE18T	565	(568)	15	20	85	300	20	2.0	2.4	20	50	4
TLGE18T	571	(574)	17	20	272	700	20	2.0	2.4	20	50	4
TLPYE18T	580	(583)	14	20	272	750	20	2.0	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

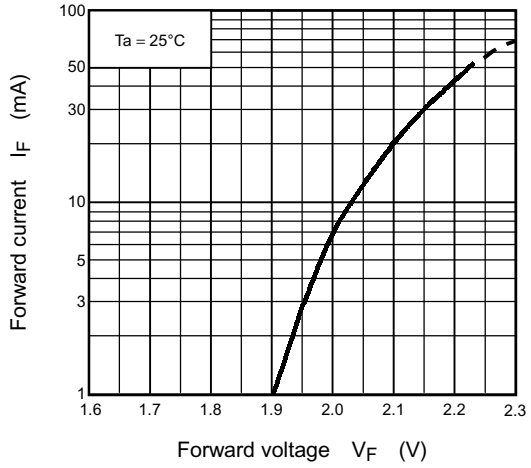
Precautions

Please be careful of the following:

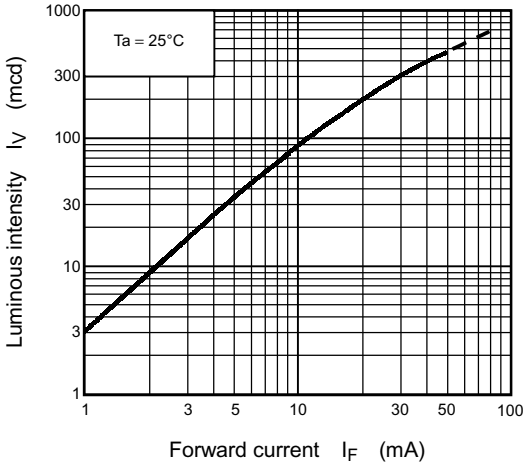
- Soldering temperature: 260°C max, soldering time: 3 s max
  (soldering portion of lead: below the lead stopper)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible 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.

TLPGE18T

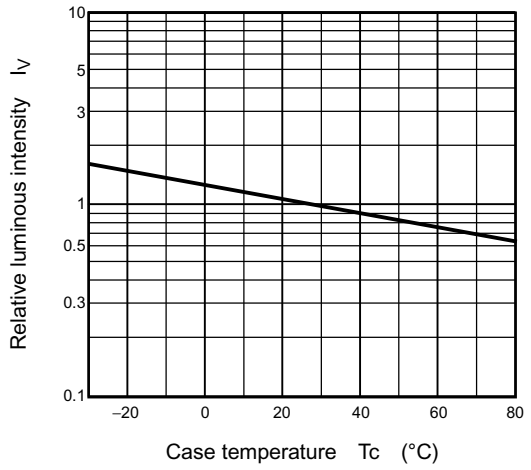
$I_F - V_F$



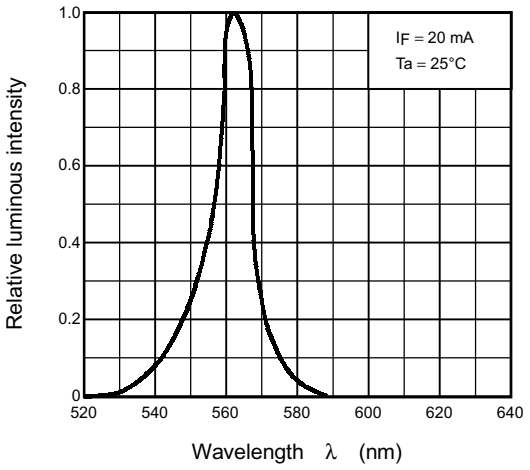
$I_V - I_F$



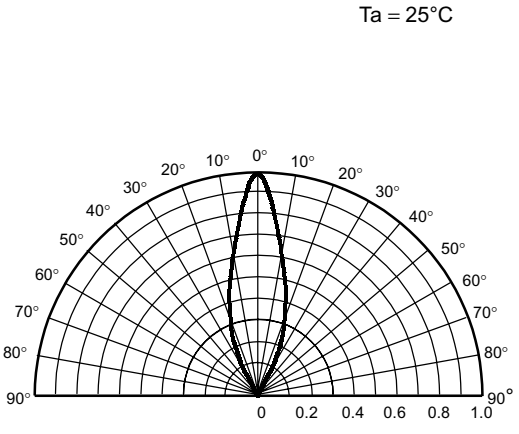
$I_V - Tc$



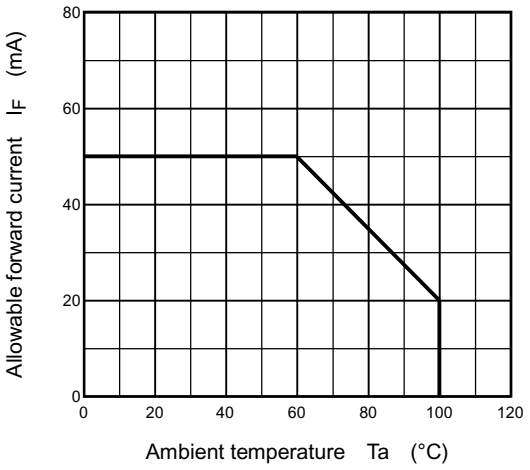
Relative luminous intensity – Wavelength



Radiation pattern

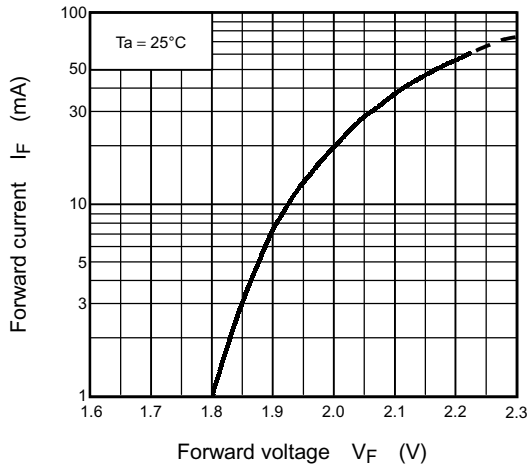


$I_F - Ta$

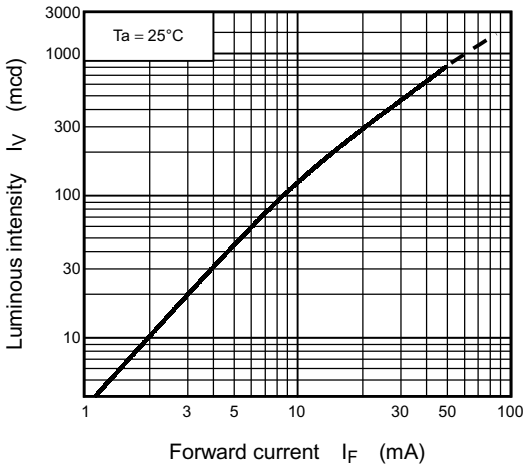


TLFGE18T

$I_F - V_F$



$I_V - I_F$



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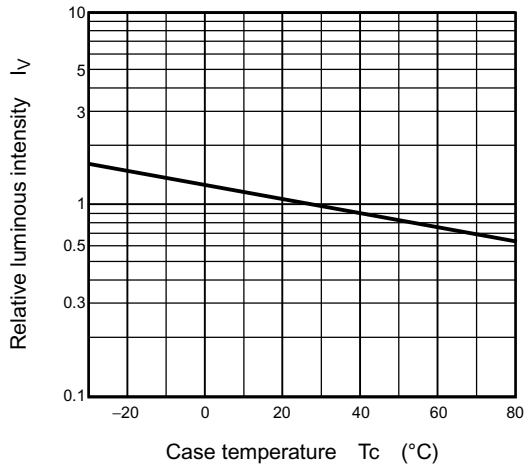
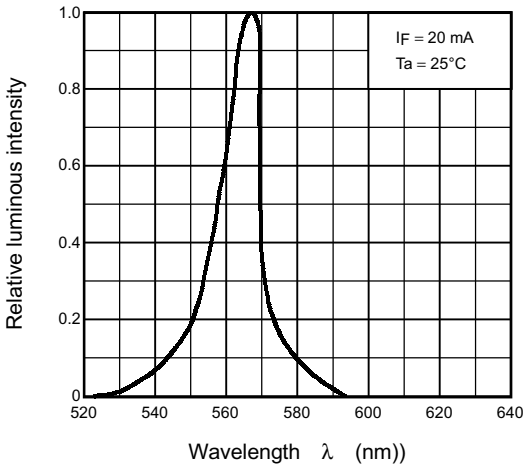
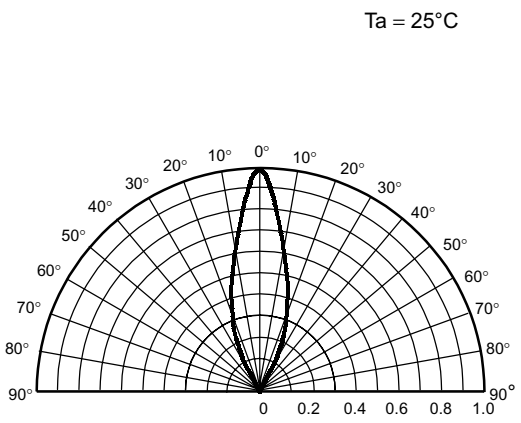


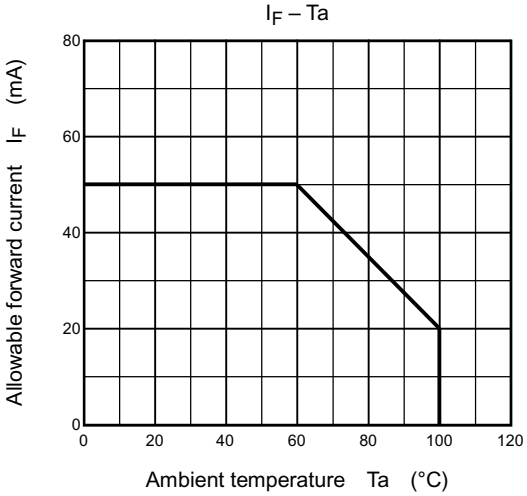
Relative luminous intensity – Wavelength



Radiation pattern

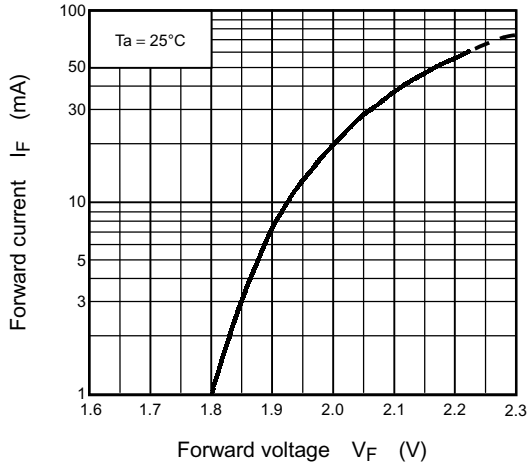


$I_F - Ta$

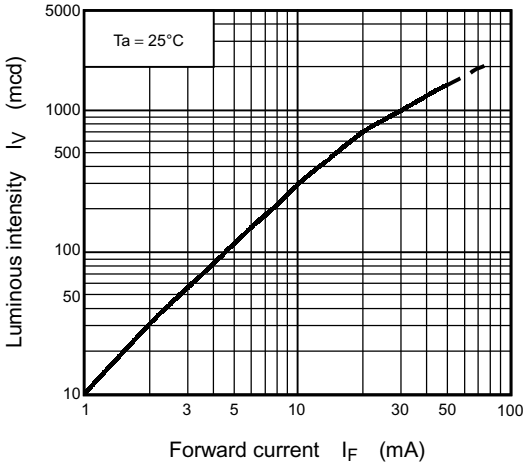


TLGE18T

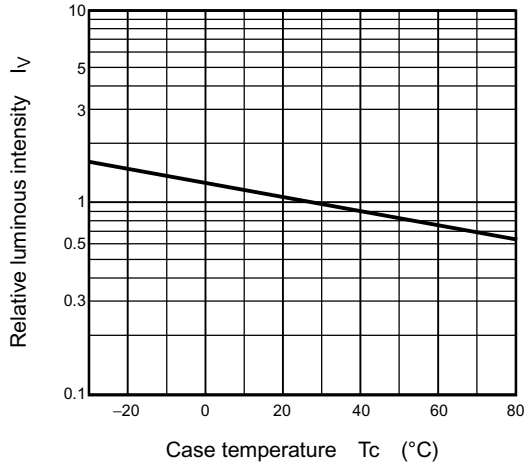
$I_F - V_F$



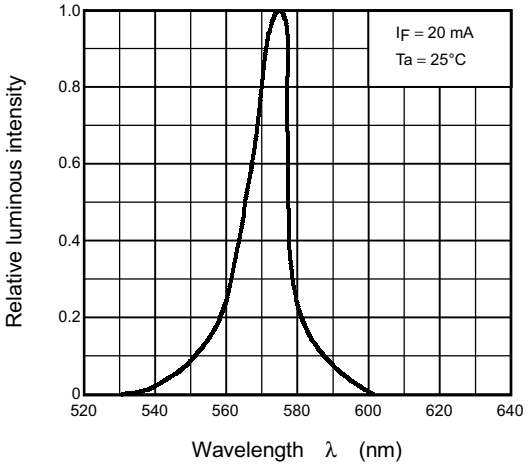
$I_V - I_F$



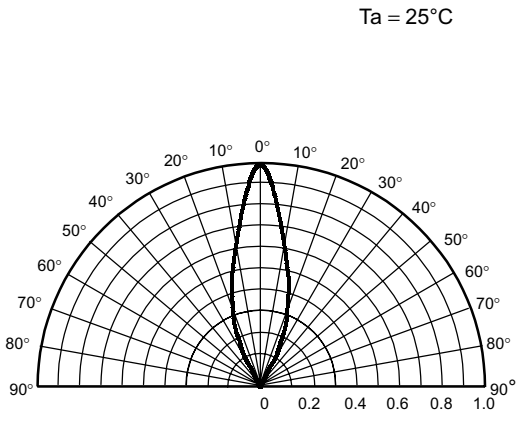
$I_V - Tc$



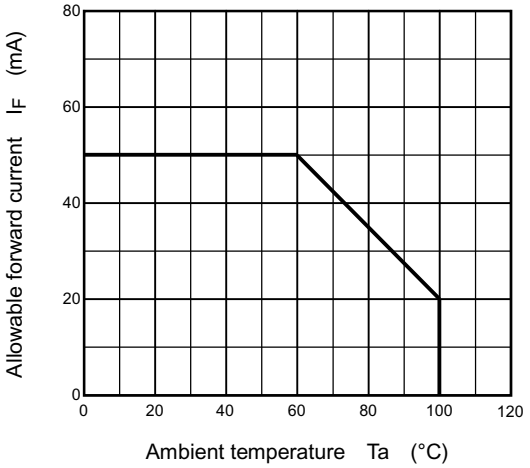
Relative luminous intensity – Wavelength



Radiation pattern

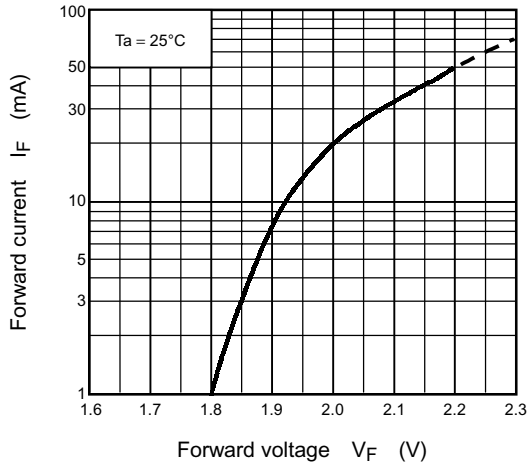


$I_F - Ta$

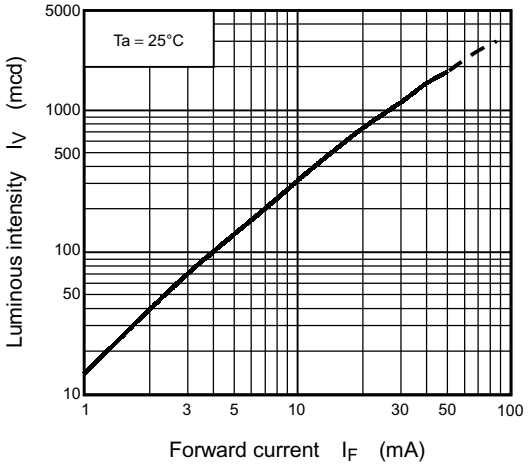


TLPYE18T

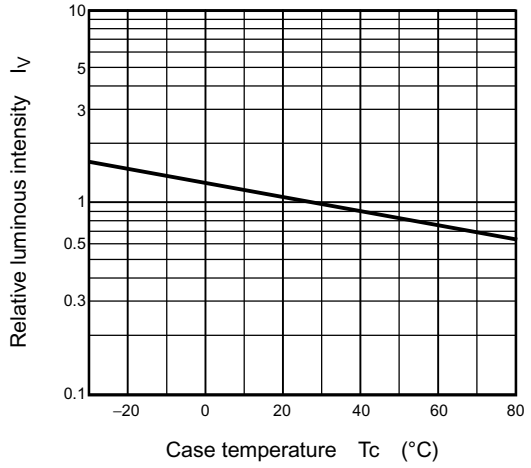
$I_F - V_F$



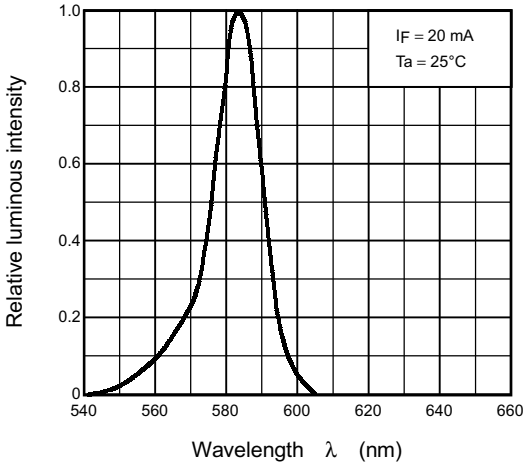
$I_V - I_F$



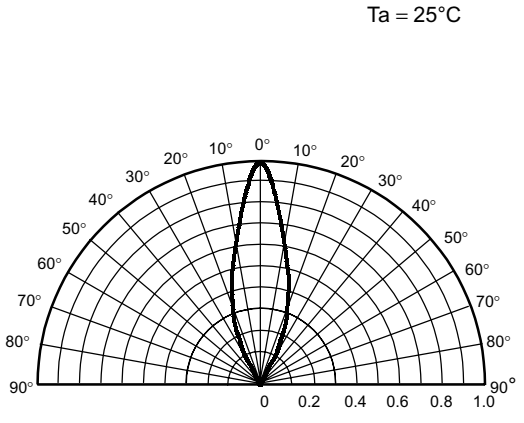
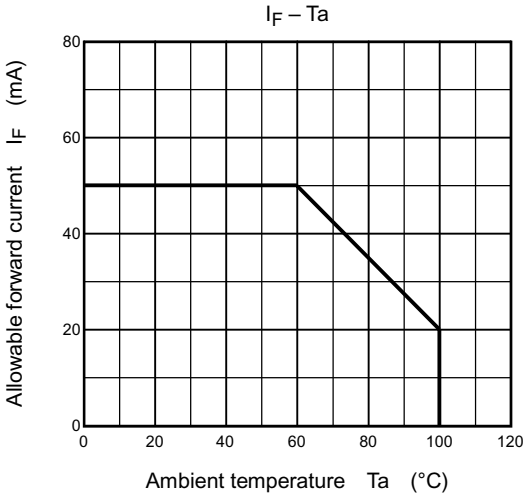
$I_V - Tc$



Relative luminous intensity – Wavelength



Radiation pattern



$I_F - Ta$