TOSHIBA InGaAlP LED

TLPGE19TP(F),TLFGE19TP(F),TLGE19TP(F),TLPYE19TP(F)

Panel Circuit Indicator

• Lead(Pb)-free products (lead: Sn-Ag-Cu)

- 5 mm package
- InGaAlP technology
- All plastic mold type
- Transparent lens
- Lineup: 3colors (pure green, green, pure yellow)
- · High intensity light emission
- Excellent low current light output
- Applications: Traffic signals, Safety equipment, Backlight
- Stopper lead type is also available TLPGE19T(F), TLFGE19T(F), TLGE19T(F), TLPYE19T(F)

Lineup

Product Name	Color	Material		
TLPGE19TP(F)	Pure Green			
TLFGE19TP(F)	Green	InGaA∉P		
TLGE19TP(F)	Green	IIIGaA≀i		
TLPYE19TP(F)	Pure Yellow			

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Unit: mm

Weight: 0.31 g

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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)	
TLPGE19TP(F)	50	4	120			
TLFGE19TP(F)	50	4	120	− 40~100	− 40~120	
TLGE19TP(F)	50	4	120	-40~100	-40°120	
TLPYE19TP(F)	50	4	120			



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}	λР	Δλ	IF	Min	Тур.	IF	Тур.	Max	lF	Max	V_{R}
TLPGE19TP(F)	558	(562)	14	20	153	500	20	2.1	2.4	20	50	4
TLFGE19TP(F)	565	(568)	15	20	272	800	20	2.0	2.4	20	50	4
TLGE19TP(F)	571	(574)	17	20	476	1300	20	2.0	2.4	20	50	4
TLPYE19TP(F)	580	(583)	14	20	476	2000	20	2.0	2.4	20	50	4
Unit		nm		mA	m	cd	mA	١	/	mA	μА	V

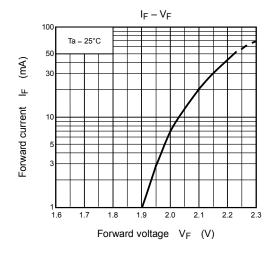
Precautions

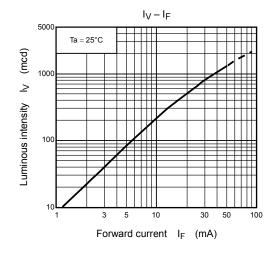
Please be careful of the following:

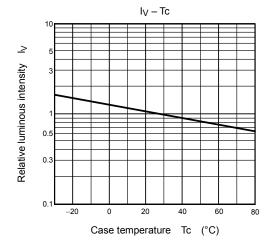
- Soldering temperature: 260°C max, soldering time: 3 s max (soldering portion of lead: up to 2 mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible LED lamp also emits some IR light.

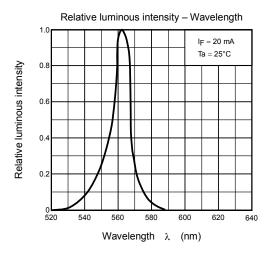
 If a photodetector is located near the LED lamp, please ensure that it will not be affected by this IR light.

TLPGE19TP(F)



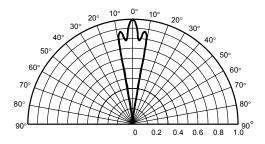


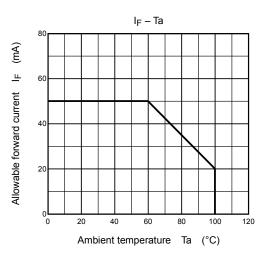




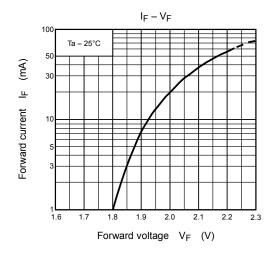
Radiation pattern

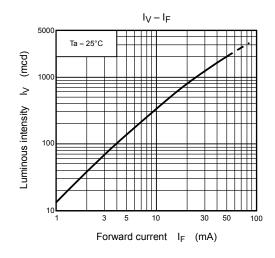
 $Ta=25^{\circ}C$

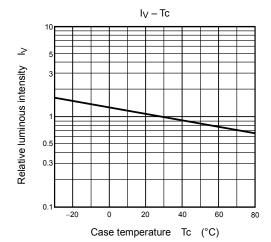


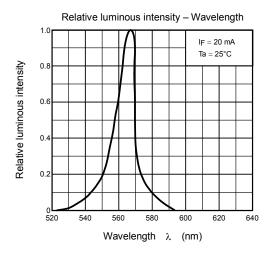


TLFGE19TP(F)



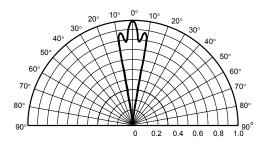


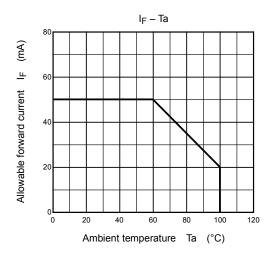




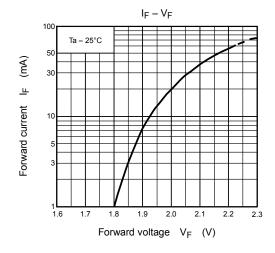
Radiation pattern

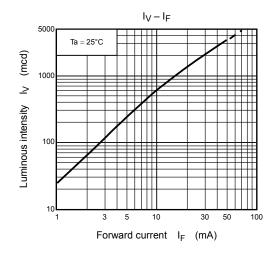
 $Ta = 25^{\circ}C$

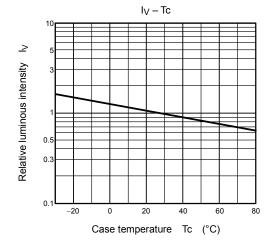


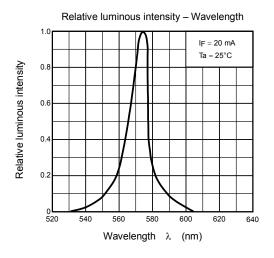


TLGE19TP(F)



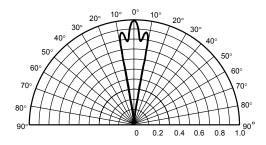


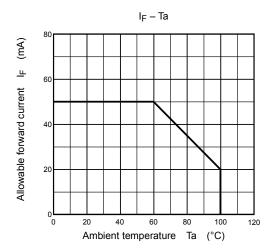




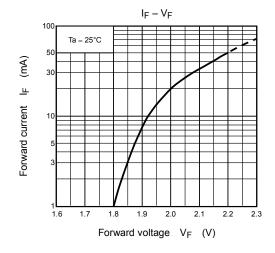
Radiation pattern

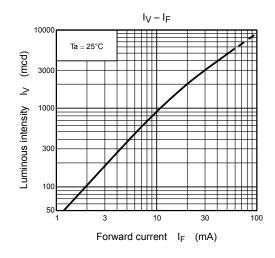
 $Ta = 25^{\circ}C$

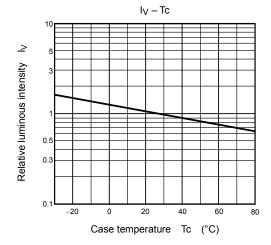


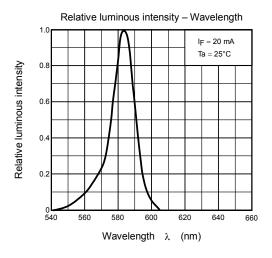


TLPYE19TP(F)



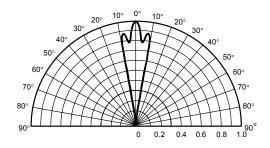


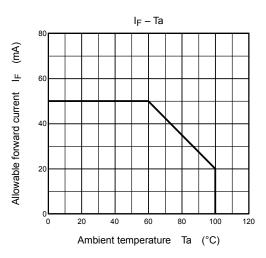




Radiation pattern

 $Ta = 25^{\circ}C$





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