<u>TOSHIBA</u>

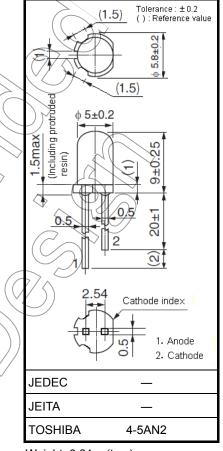
Unit: mm

TOSHIBA InGaA{P LED

TLPGE18TP(F),TLFGE18TP(F),TLGE18TP(F),TLPYE18TP(F)

Panel Circuit Indicator

- ϕ 5mm package
- InGaAlP technology
- Transparent lens
- Lineup: 3 colors (pure green, green, pure yellow)
- High intensity light emission
- Excellent low current light output
- Stopper lead type is also available TLPGE18T(F), TLFGE18T(F), TLGE18T(F), TLPYE18T(F)
- Applications : Various types of information panels, backlightings, etc



Lineup

Product Name	Color	Material	>
TLPGE18TP(F)	Pure Green	(())	
TLFGE18TP(F)	Green	InGaAℓP	
TLGE18TP(F)	Green		\sim
TLPYE18TP(F)	Pure Yellow		/
		$\langle \langle \rangle$	

Weight: 0.31 g (typ.)

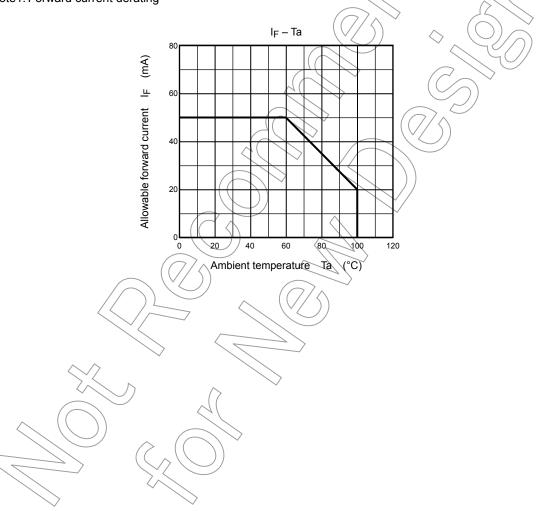
Absolute Maximum Ratings (Ta = 25°C)

Product Name	Forward Current I _F (mA)(Note1)	Reverse Voltage V _R (V)	Power Dissipation P _D (mW)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	
TLPGE18TP(F)	50	4	120			
TLFGE18TP(F)	50	4	120	-40 to 100	-40 to 120	
TLGE18TP(F)	50	4	120	-4010100	-40 (0 120	
TLPYE18TP(F)	50	4	120			

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).

Note1: Forward current derating



Electrical and Optical Characteristics (Ta = 25°C)

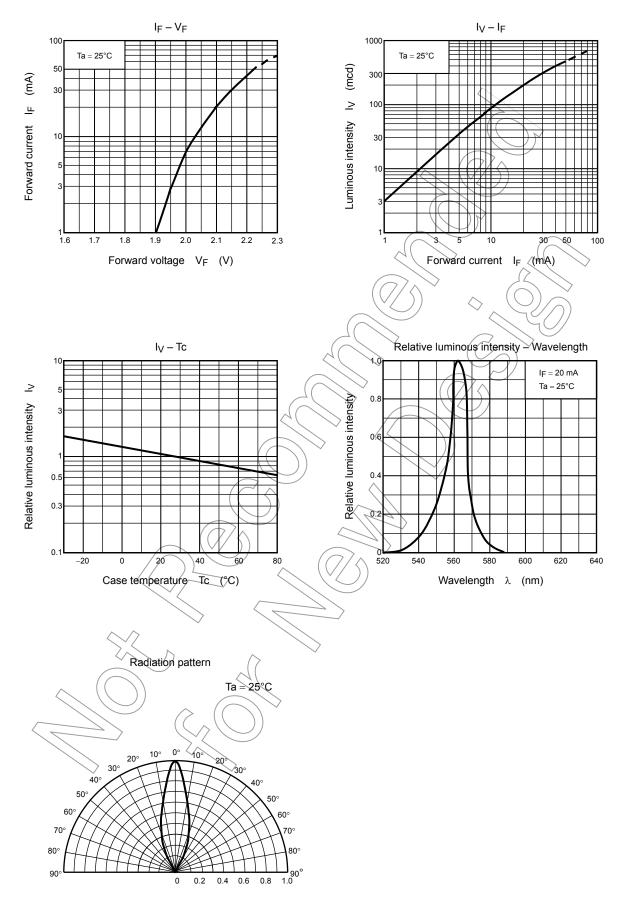
Product Name	Typ. Emission Wavelength			Luminous Intensity I _V		Forward Voltage V _F			Reverse Current I _R			
	λ_{d}	λp	Δλ	١ _F	Min	Тур.	١ _F	Тур.	Max	١ _F	Max	VR
TLPGE18TP(F)	558	562	14	20	85	200	20	2.1	2.4	20	50	4
TLFGE18TP(F)	565	568	15	20	85	300	20	2.0	2.4	20	50	4
TLGE18TP(F)	571	574	17	20	272	700	20	2.0	2.4	20	50	4
TLPYE18TP(F)	580	583	14	20	272	750	20	2.0	2.4) 20	50	4
Unit		nm		mA	m	cd	mA	$\left(\right)$	$\sqrt{2}$	mA	μA	V

Precautions

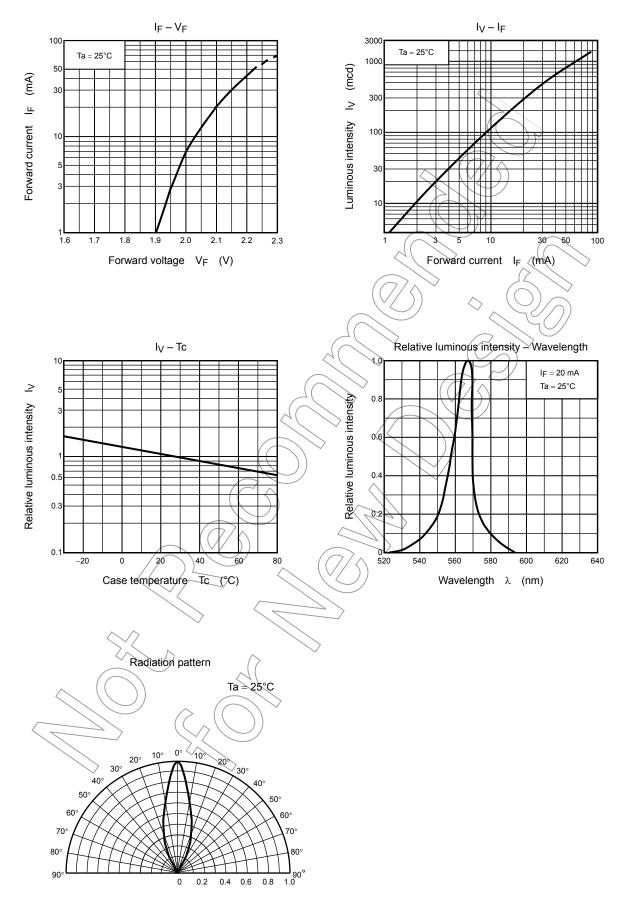
Please be careful of the following:

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

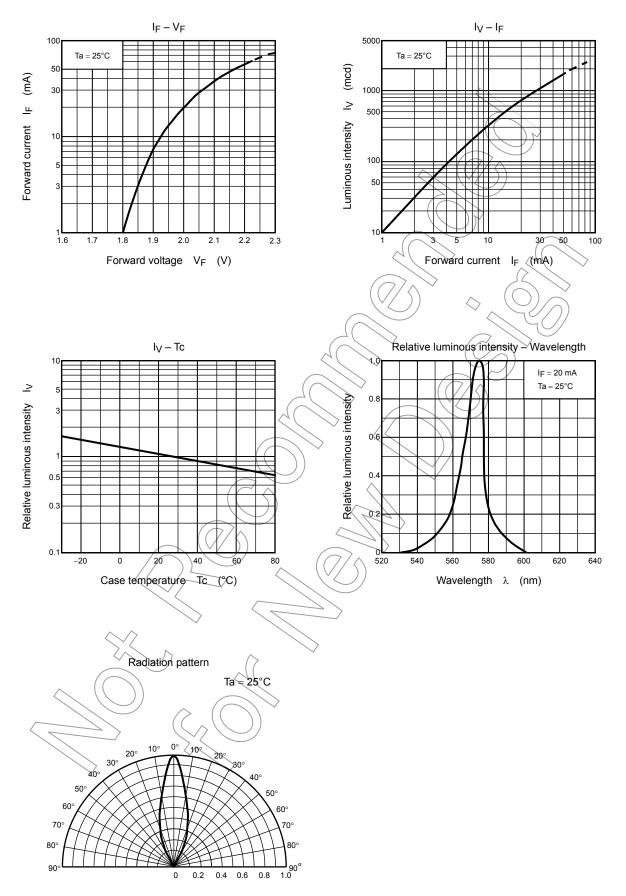
TLPGE18TP(F)



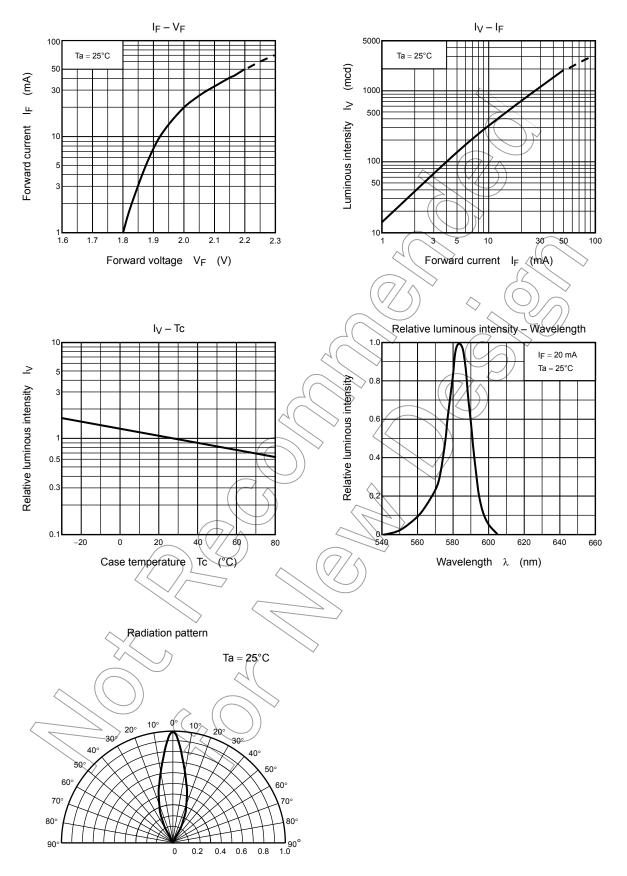
TLFGE18TP(F)



TLGE18TP(F)



TLPYE18TP(F)



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