TOSHIBA **TENTATIVE** TOSHIBA InGaA_lP LED **TLOU156P, TLSU156P, TLYU156P**

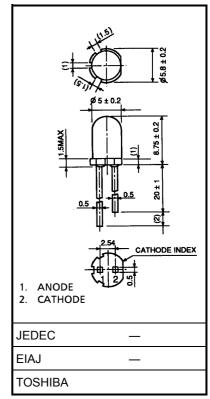
Panel Circuit Indicator

- InGaAℓP LED
- Without stand-offs
- All plastic mold type
- Colorless clear lens
- Lineup: 3 colors (red,orange,yellow)
- Suitable for high-brightness and less electricity consumption. ٠
- All plastic molded lens, provides an excellent on-off contrast ratio.
- Applications: Backlight, light for decoration, switches, ٠ various indicator, personal equipment

Lineup

Product	Color	Material		
TLOU156P	Orange	InGaAtP		
TLSU156P	Red	InGaAtP		
TLYU156P	Yellow	InGaAłP		

Maximum Ratings (Ta = 25°C)



Weight: 0.31 g

Product	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)
TLOU156P	30	4	72	-30~85	-40~120
TLSU156P	30	4	72	-30~85	-40~120
TLYU156P	30	4	75	-30~85	-40~120

Unit in mm

Electrical And Optical Characteristics(Ta = 25°C)

Product	Typ.Emission Wavelength		Luminous Intensity I _V		Forward Voltage VF			Reverse Current I _R			
	λ _p	Δλ	١ _F	Min	Тур.	١ _F	Тур.	Max	١ _F	Max	V _R
TLOU156P	612	15	20	153	900	20	2.0	2.4	20	50	4
TLSU156P	636	17	20	153	900	20	2.0	2.4	20	50	4
TLYU156P	590	13	20	153	500	20	2.1	2.5	20	50	4
Unit	n	m	mA	m	cd	mA	١	/	mA	μA	V

Precaution

Please be careful of the followings

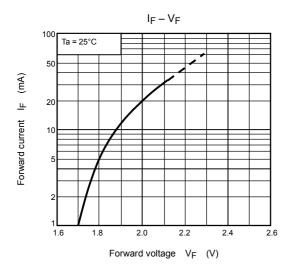
• Soldering temperature: 260°C max Soldering time: 3 s max

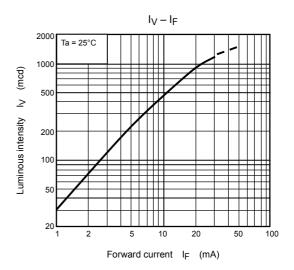
(Soldering portion of lead: Up to 2 mm from the body of the device)

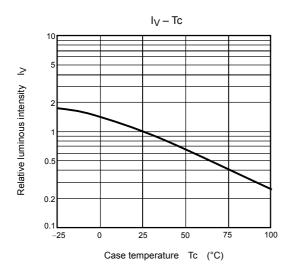
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible LED lamp also emits some IR light. If a photodetector is located near the LED lamp, please ensure that it will not be affected by this IR light.

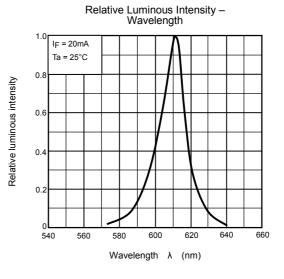
TOSHIBA

TLOU156P



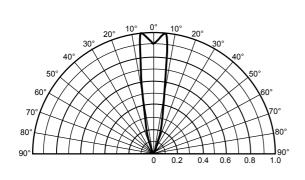


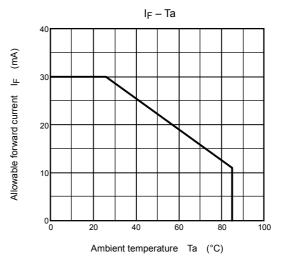




Radiation Pattern

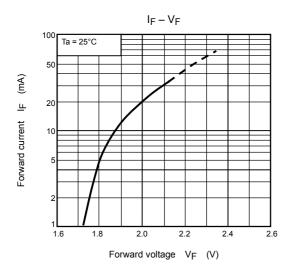


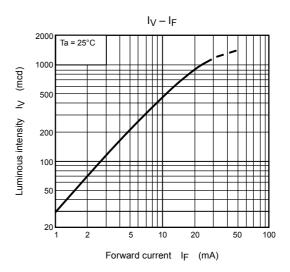




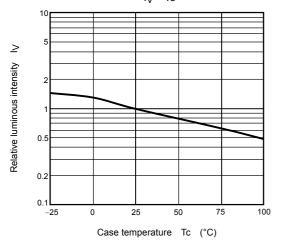
TOSHIBA

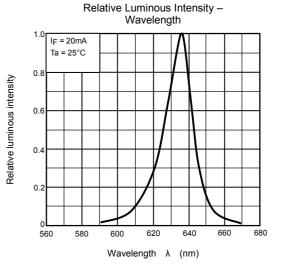
TLSU156P





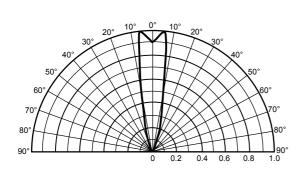
I_V – Tc

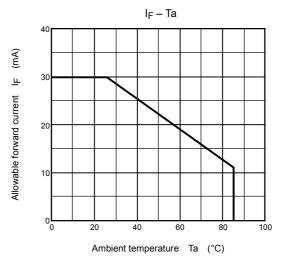




Radiation Pattern

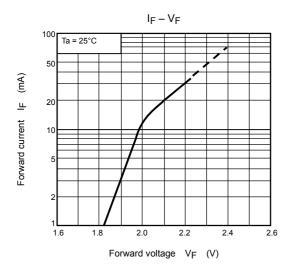
Ta = 25°C

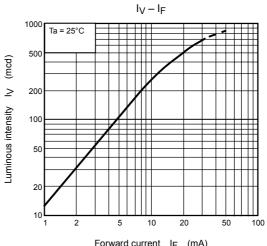




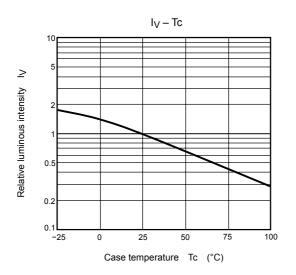
TOSHIBA

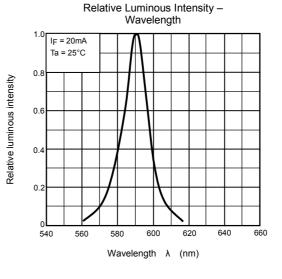
TLYU156P





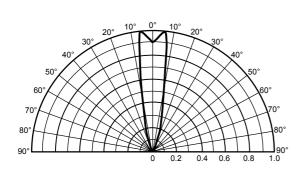
Forward current IF (mA)

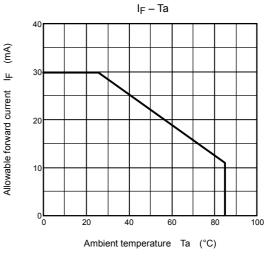




Radiation Pattern

Ta = 25°C





2002-09-25

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