

TENTATIVE

TOSHIBA InGaAlP LED

TLOU123, TLSU123, TLYU123

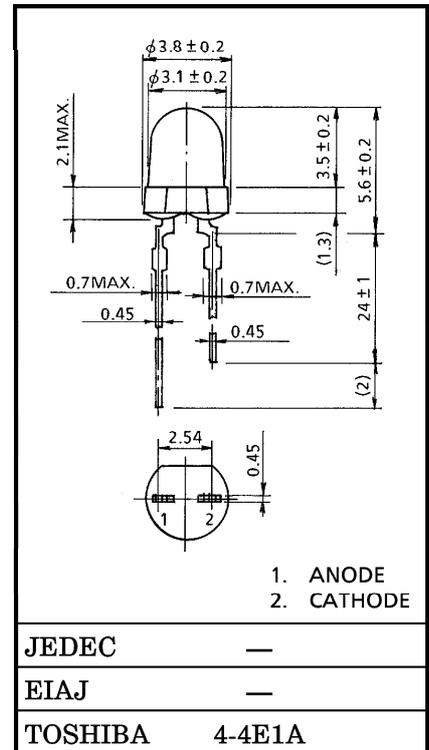
PANEL CIRCUIT INDICATOR

Unit in mm

- InGaAlP LED
- All Plastic Mold Type
- Colored Transparent Lens
- Lineup : 3 Colors (Red, Orange, Yellow)
- Suitable for High-Brightness and Less Electricity Consumption.
- All Plastic Molded Lens, Provides an Excellent ON-OFF Contrast Ratio.
- Applications : Backlight, Light for Decoration, Switches, Various Indicator, Personal Equipment

LINEUP

PRODUCT	COLOR	MATERIAL
TLOU123	ORANGE	InGaAlP
TLSU123	RED	InGaAlP
TLYU123	YELLOW	InGaAlP



Weight : 0.14 g

MAXIMUM RATINGS (Ta = 25°C)

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)
TLOU123	30	4	72	-20~75	-30~100
TLSU123	30	4	72	-20~75	-30~100
TLYU123	30	4	75	-20~75	-30~100

ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)

PRODUCT	TYP. EMISSION WAVELENGTH			LUMINOUS INTENSITY I _V			FORWARD VOLTAGE V _F			REVERSE CURRENT I _R	
	λ _p	Δλ	I _F	MIN	TYP.	I _F	TYP.	MAX	I _F	MAX	V _R
TLOU123	612	15	20	85	400	20	2.0	2.4	20	50	4
TLSU123	636	17	20	85	270	20	2.0	2.4	20	50	4
TLYU123	590	13	20	85	220	20	2.1	2.5	20	50	4
UNIT	nm		mA	mcd		mA	V		mA	μA	V

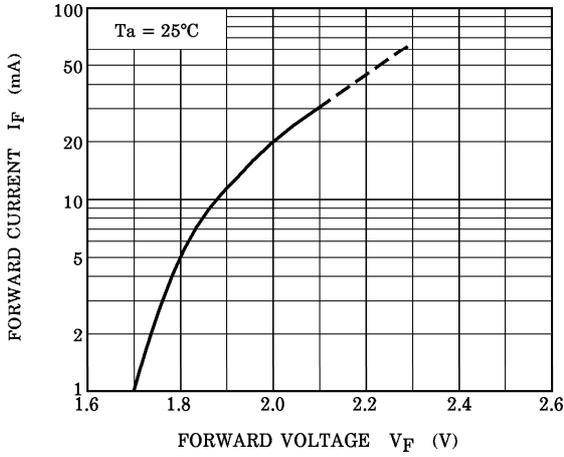
PRECAUTION

Please be careful of the followings

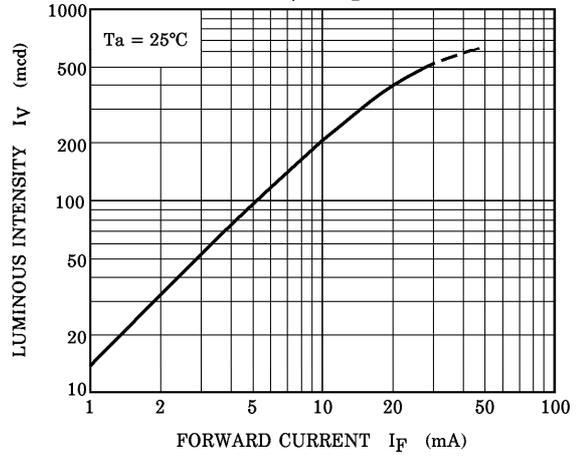
- Soldering temperature : 260°C max Soldering time : 3 s max
(Soldering portion of lead : up to 2 mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- 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.

TLOU123

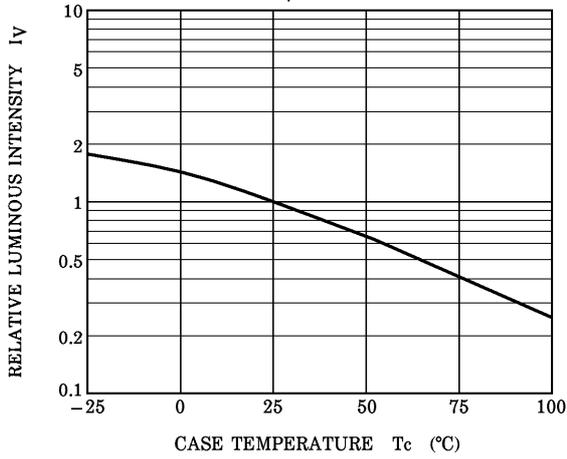
$I_F - V_F$



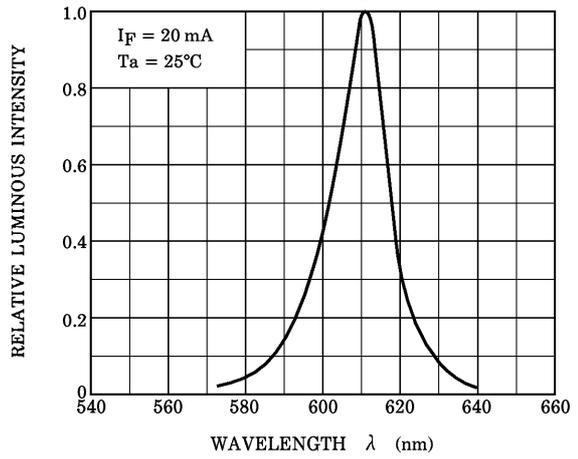
$I_V - I_F$



$I_V - T_c$

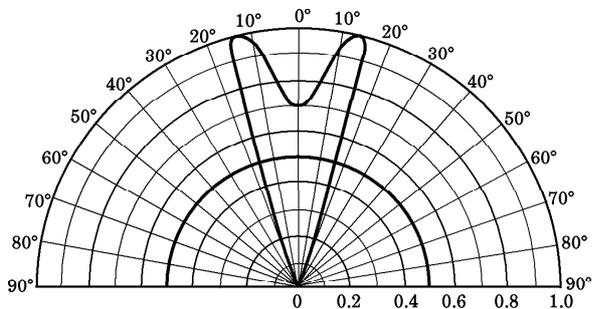


RELATIVE LUMINOUS INTENSITY - WAVELENGTH

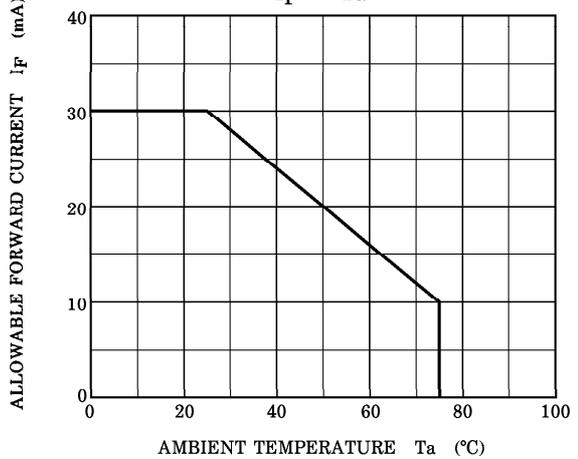


RADIATION PATTERN

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

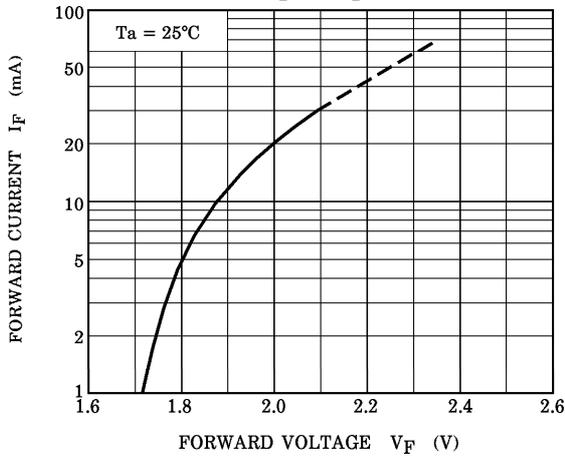


$I_F - T_a$

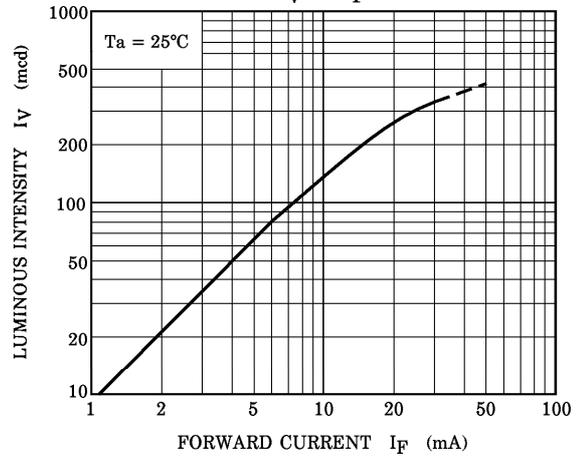


TLSU123

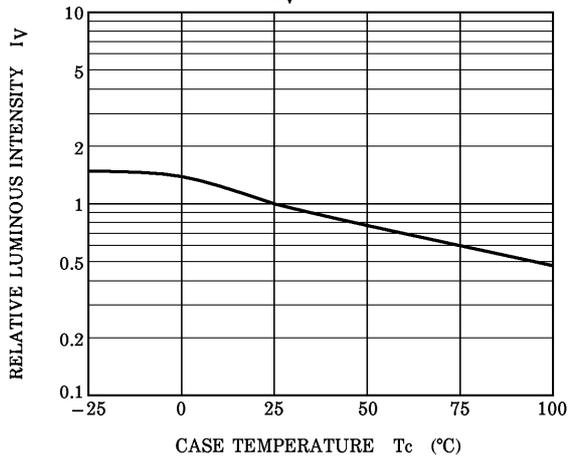
$I_F - V_F$



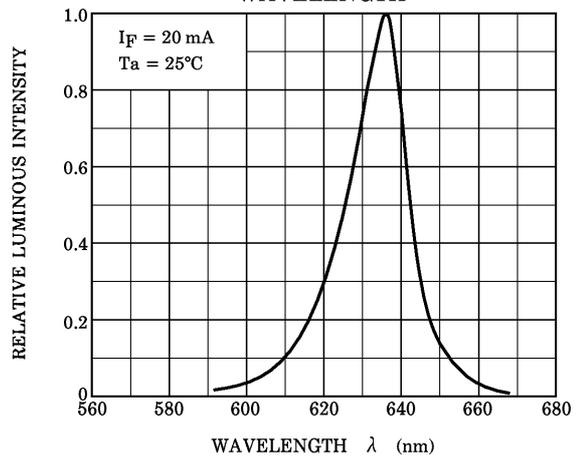
$I_V - I_F$



$I_V - T_c$

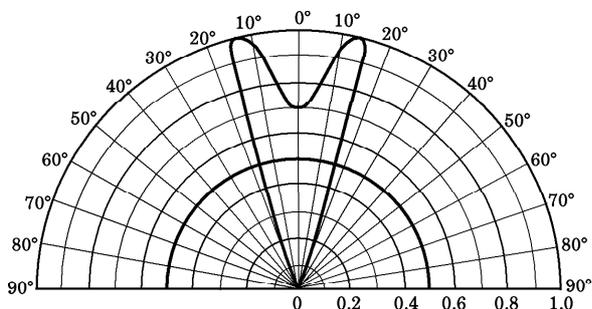


RELATIVE LUMINOUS INTENSITY - WAVELENGTH

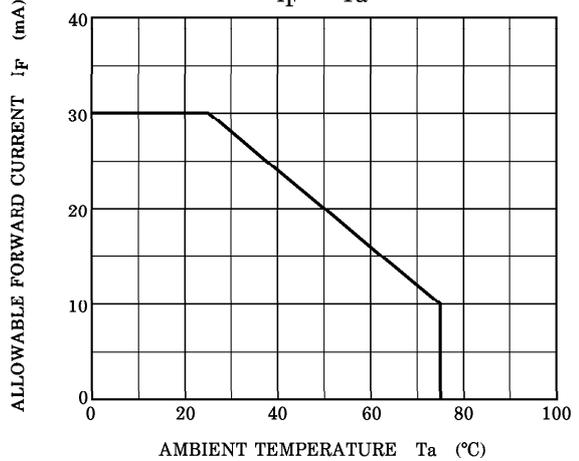


RADIATION PATTERN

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

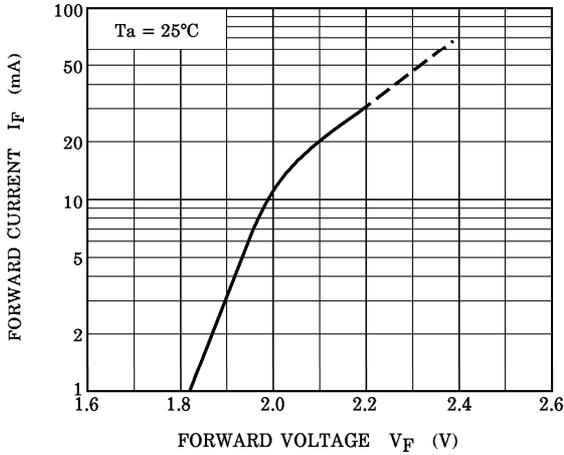


$I_F - T_a$

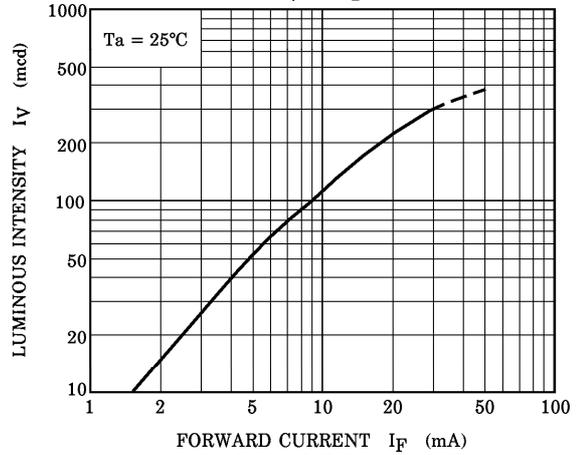


TLYU123

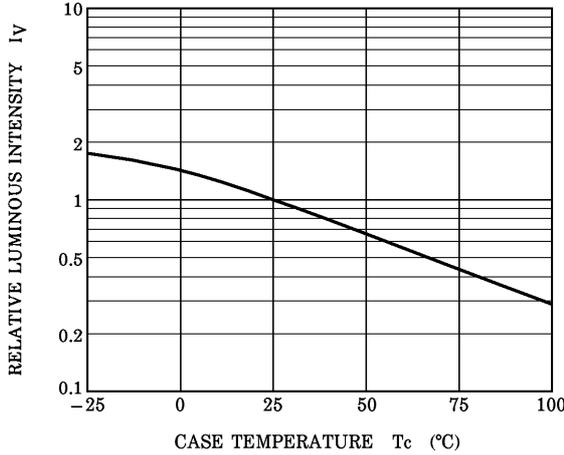
$I_F - V_F$



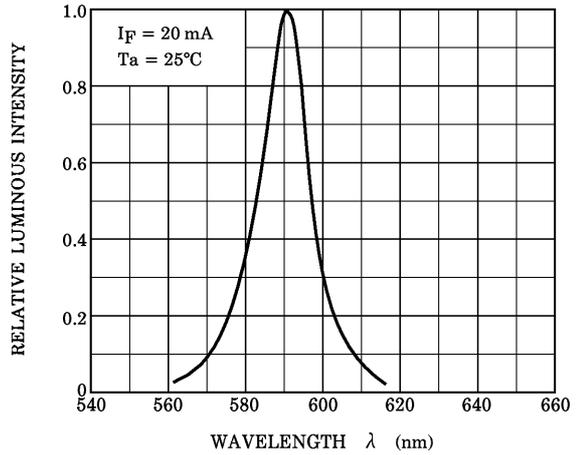
$I_V - I_F$



$I_V - T_c$

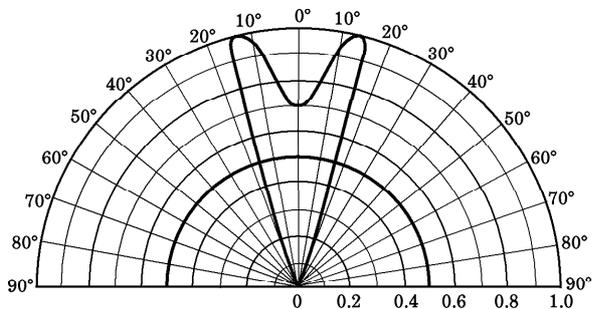


RELATIVE LUMINOUS INTENSITY - WAVELENGTH

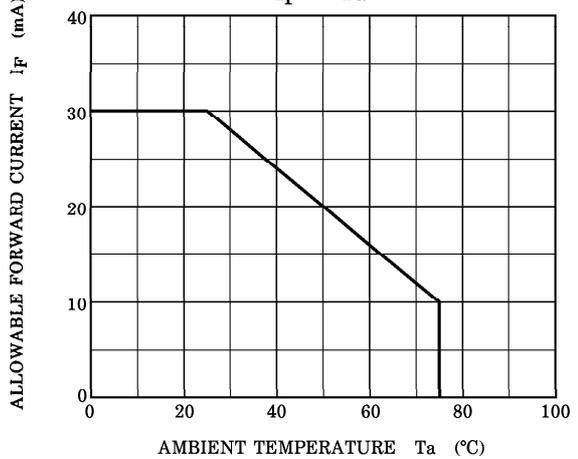


RADIATION PATTERN

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



$I_F - T_a$



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