

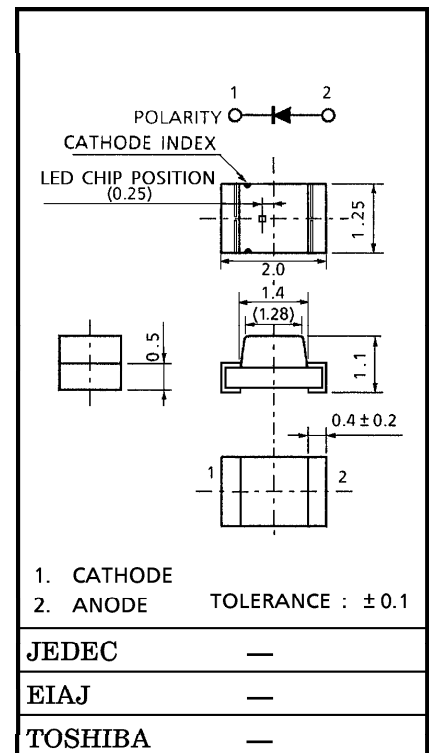
TOSHIBA LED LAMP

TLRE1002 (T02), TLSU1002 (T02), TLOE1002 (T02), TLOU1002 (T02), TLYE1002 (T02)  
 TLYU1002 (T02), TLGE1002 (T02), TLGU1002 (T02), TLPGE1002 (T02), TLPGU1002 (T02)

PANEL CIRCUIT INDICATOR

Unit in mm

- Surface Mount Device
- 2.0 (L) × 1.25 (W) × 1.1 (H) mm Size  
Small Package - High Density Mounting is Available
- InGaAlP LED
- It can be manufactured high-luminosity of equipment or reduce of electric power consumption by change in the high-luminosity LED from general-luminosity one.
- Colors : Red, Orange, Yellow, Green, Pure Green
- Can be mounted using surface mounter.
- Reflow Soldering is possible.
- Standard Embossed Taping  
4 mm Pitch : T02 (3000 pcs / Reel)
- Applications : Telephone Cordless / Cellular  
Portable Equipment, Backlight, etc.



Weight : 2 mg

LINE-UP

PRODUCT NAME	COLOR	MATERIAL
TLRE1002	Red	InGaAlP
TLSU1002	Red	InGaAlP
TLOE1002	Orange	InGaAlP
TLOU1002	Orange	InGaAlP
TLYE1002	Yellow	InGaAlP
TLYU1002	Yellow	InGaAlP
TLGE1002	Green	InGaAlP
TLGU1002	Green	InGaAlP
TLPGE1002	Pure-Green	InGaAlP
TLPGU1002	Pure-Green	InGaAlP

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MAXIMUM RATINGS (Ta = 25°C)

PRODUCT NAME	FORWARD CURRENT (DC) I <sub>F</sub> (mA)	REVERSE VOLTAGE V <sub>R</sub> (V)	POWER DISSIPATION P <sub>D</sub> (mW)	OPERATION TEMPERATURE T <sub>opr</sub> (°C)	STORAGE TEMPERATURE T <sub>stg</sub> (°C)
TLRE1002	25	4	60	-25~80	-30~85
TLSU1002	25	4	60		
TLOE1002	25	4	60		
TLOU1002	25	4	60		
TLYE1002	25	4	62.5		
TLYU1002	25	4	62.5		
TLGE1002	25	4	70		
TLGU1002	25	4	70		
TLPGE1002	25	4	70		
TLPGU1002	25	4	70		

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

PRODUCT NAME	FORWARD VOLTAGE V <sub>F</sub>			REVERSE CURRENT I <sub>R</sub>		
	MIN	TYP.	MAX	I <sub>F</sub>	V <sub>R</sub>	
TLRE1002	—	1.85	2.4	20	50	4
TLSU1002	—	2.0	2.4	20	50	4
TLOE1002	—	1.95	2.4	20	50	4
TLOU1002	—	2.0	2.4	20	50	4
TLYE1002	—	2.1	2.5	20	50	4
TLYU1002	—	2.1	2.5	20	50	4
TLGE1002	—	2.3	2.8	20	50	4
TLGU1002	—	2.4	2.8	20	50	4
TLPGE1002	—	2.3	2.8	20	50	4
TLPGU1002	—	2.3	2.8	20	50	4
UNIT	V			mA	μA	V

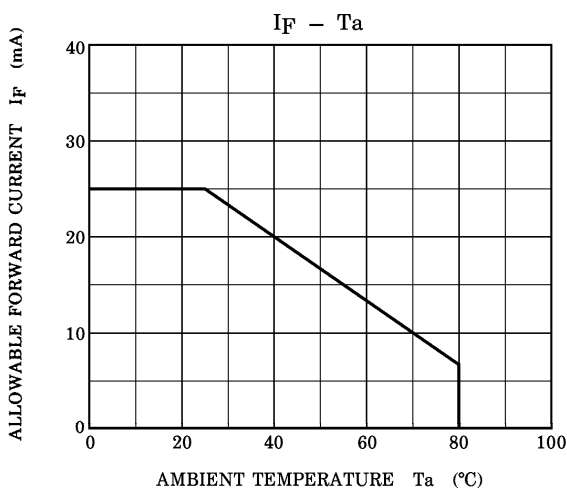
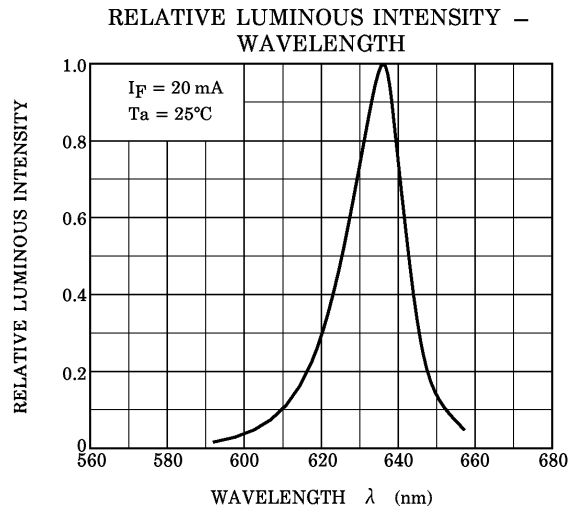
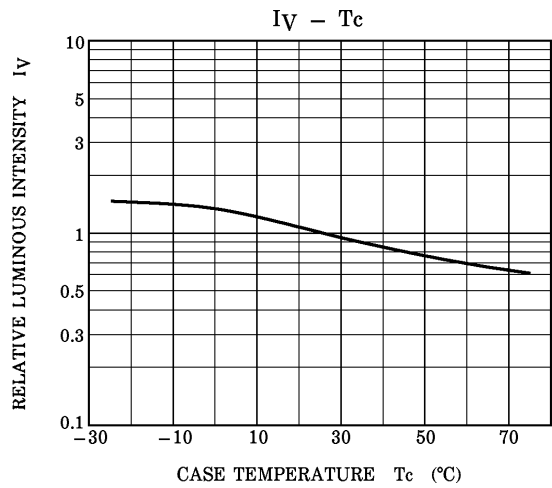
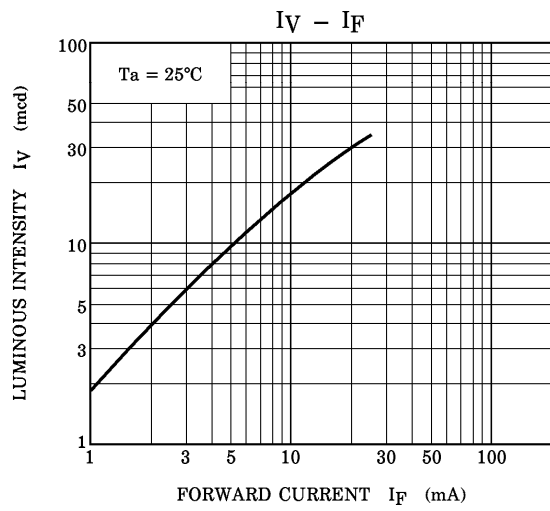
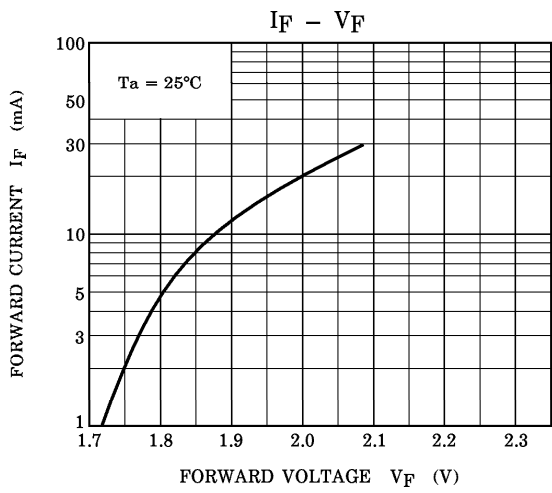
OPTICAL CHARACTERISTICS (Ta = 25°C)

PRODUCT NAME	LUMINOUS INTENSITY I <sub>V</sub>			
	MIN	TYP.	MAX	I <sub>F</sub>
TLRE1002	15.3	45	—	20
TLSU1002	8.52	30	—	20
TLOE1002	27.2	60	—	20
TLOU1002	15.3	40	—	20
TLYE1002	27.2	60	—	20
TLYU1002	8.5	30	—	20
TLGE1002	15.3	50	—	20
TLGU1002	8.5	27	—	20
TLPGE1002	2.72	10	—	20
TLPGE1002	1.53	6	—	20
UNIT	mcd			mA

PRODUCT NAME	EMISSION SPECTRUM							I <sub>F</sub>
	Peak Emission Wavelength λ <sub>p</sub>			Δλ TYP.	Dominant Wavelength λ <sub>d</sub>			
	MIN	TYP.	MAX		MIN	TYP.	MAX	
TLRE1002	—	644	—	18	—	630	—	20
TLSU1002	—	636	—	17	—	623	—	20
TLOE1002	—	612	—	15	—	605	—	20
TLOU1002	—	612	—	15	—	605	—	20
TLYE1002	—	590	—	13	—	587	—	20
TLYU1002	—	590	—	13	—	587	—	20
TLGE1002	—	574	—	11	—	571	—	20
TLGU1002	—	574	—	11	—	571	—	20
TLPGE1002	—	562	—	11	—	558	—	20
TLPGU1002	—	562	—	11	—	558	—	20
UNIT	nm			nm	nm			mA

(Note) : 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.

TL SU1002-1



TLSU1002-2  
[RADIATION PATTERN]

Ta = 25°C

