

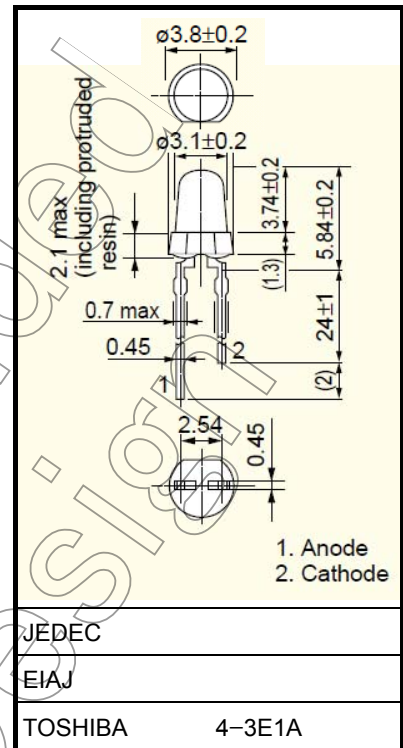
TOSHIBA InGaAlP LED

# TLRME50C(F)

Unit: mm

○ Panel Circuit Indicator

- 3mm package wide viewing angle
- InGaAlP
- Emitted color: Red
- Colored, Transparent lens
- Applications: Various types of information panels, indicators for amusement equipment and panel backlighting illumination sources.



**Absolute Maximum Ratings (Ta = 25°C)**

CHARACTERISTICS	SYMBOL	RATING	UNIT
FORWARD CURRENT	I <sub>F</sub>	50	mA
REVERSE VOLTAGE	V <sub>R</sub>	4	V
POWER DISSIPATION	P <sub>D</sub>	120	mW
OPERATING TEMPERATURE	T <sub>opr</sub>	-40~100	°C
STORAGE TEMPERATURE	T <sub>stg</sub>	-40~120	°C

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).

JEDEC  
EIAJ  
TOSHIBA 4-3E1A  
Weight: 0.14 g(Typ.)

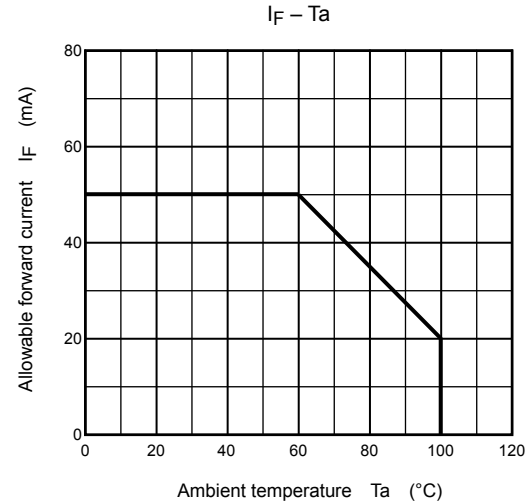
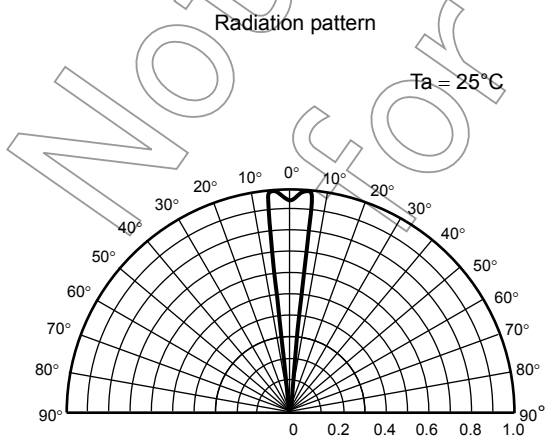
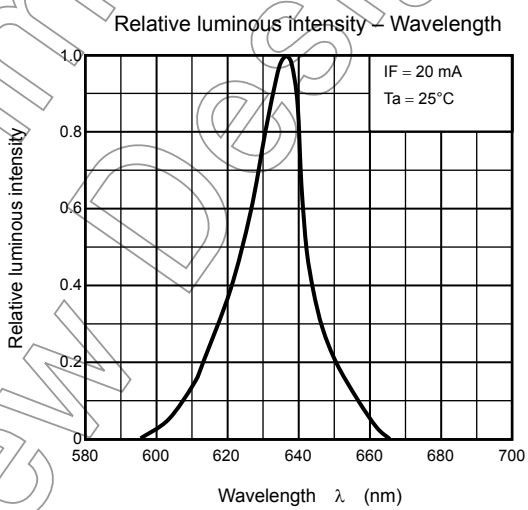
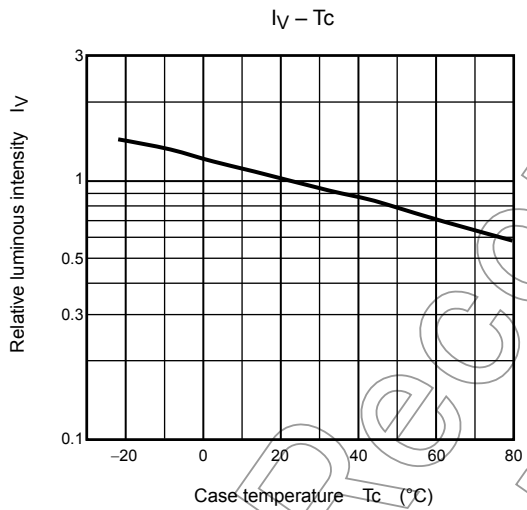
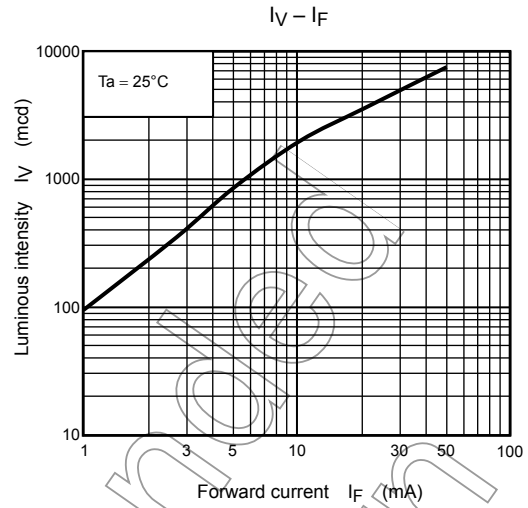
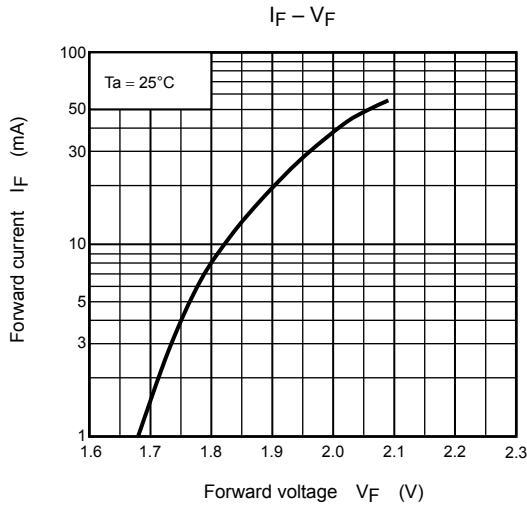
**ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)**

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
FORWARD VOLTAGE	V <sub>F</sub>	I <sub>F</sub> =20mA	—	1.9	2.4	V
REVERSE CURRENT	I <sub>R</sub>	V <sub>R</sub> =4V	—	—	50	μA
LUMINOUS INTENSITY	I <sub>v</sub>	I <sub>F</sub> =20mA(Note)	1530	3500	—	mcd
PEAK WAVELENGTH	λ <sub>P</sub>	I <sub>F</sub> =20mA	—	(636)	—	nm
SPECTRAL LINE HALF WIDTH	Δλ	I <sub>F</sub> =20mA	—	23	—	nm
DOMINANT WAVELENGTH	λ <sub>d</sub>	I <sub>F</sub> =20mA	—	626	—	nm

(Note): Lamps are classified into the following ranks according to their luminous intensity, and packed in boxes by each rank. T: 1530-4140 mcd, U: 2720-7360 mcd, V: 4760mcd-

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



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