

# TOSHIBA

## Surface Mount LED

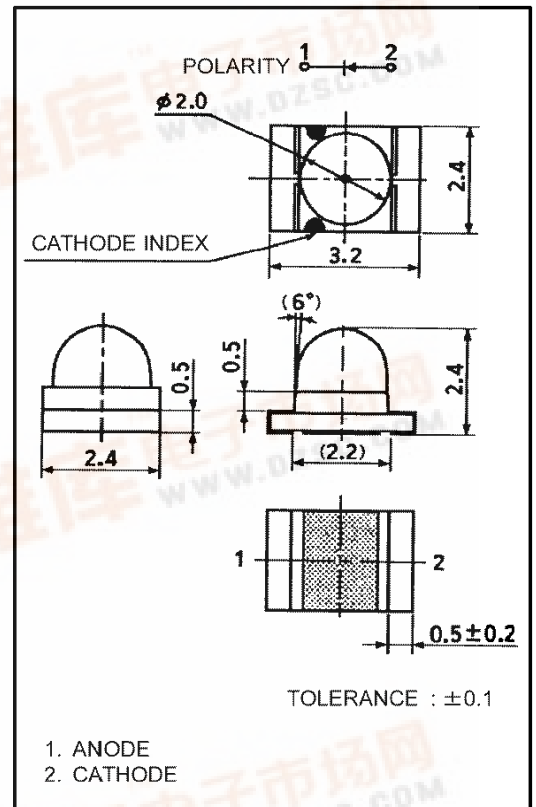
### TLRE1005B

#### Features

3.2 (L) x 2.4 (W) x 2.4 (H) mm  
 2 mm lens top type  
 InGaAlP LED  
 Reflow soldering is possible  
 Standard embossed taping 4 mm pitch : T03 (1000 pcs/reel)

#### Applications

High-output backlighting source  
 Battery-powered equipment  
 Message boards  
 Portable devices  
 Computer peripherals



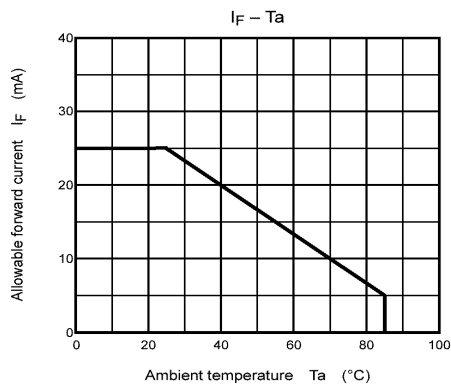
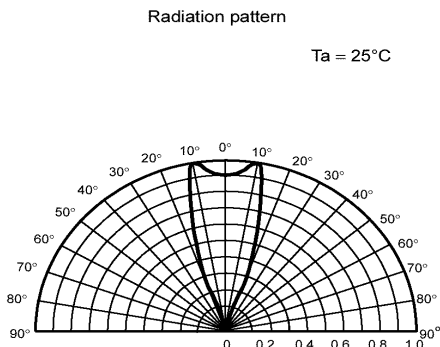
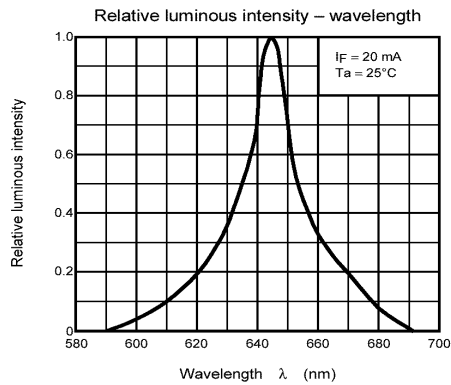
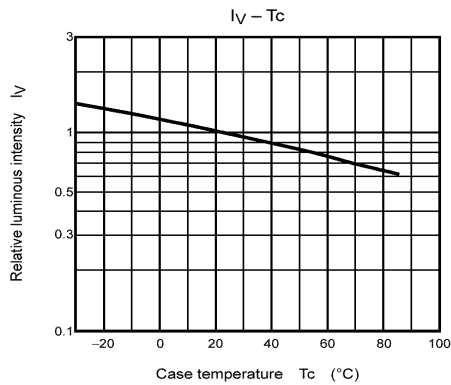
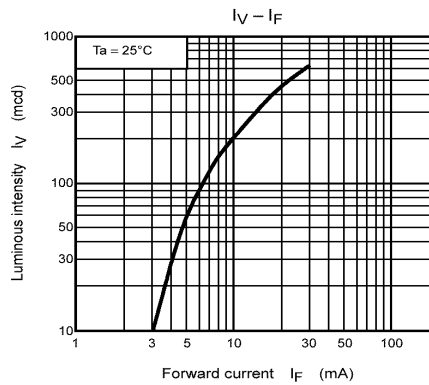
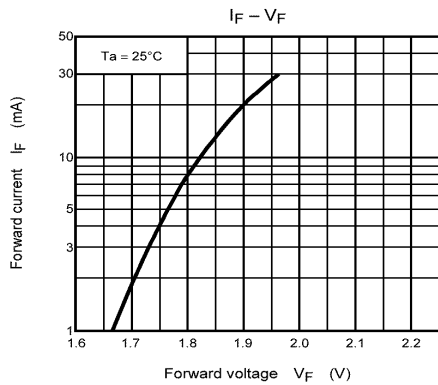
#### Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I <sub>F</sub>	25	mA
Reverse Voltage	V <sub>R</sub>	4.00	V
Power Dissipation	P <sub>d</sub>	60.00	mW
Operating Temperature	T <sub>opr</sub>	-40 ~ 85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ 100	°C
Soldering Temperature	T <sub>sol</sub>	260	°C
Soldering Time	-	for 3 sec. max	-

#### Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	1.90	2.40	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	153.00	450.00	-	mcd
Viewing Angle	2θ <sup>1/2</sup>	-	-	45°	-	deg.
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	-	644	-	nm
Dominant Wavelength	λ <sub>d</sub>	I <sub>F</sub> =20mA	-	630	-	nm
Spectral Line Half Width	Δλ	I <sub>F</sub> =20mA	-	18	-	nm

### TLRE1005B Graphs



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