

# TOSHIBA

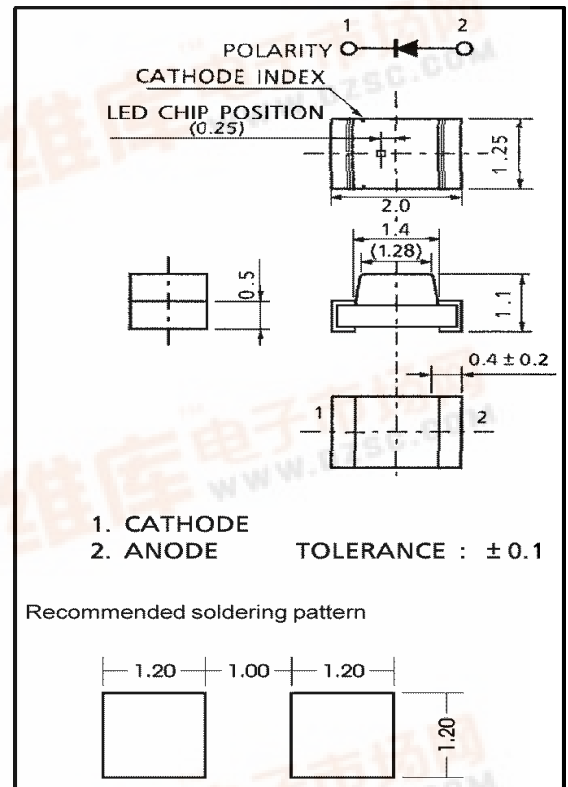
## Toshiba TLxE1002A SMT LEDs

### Features

2.0 X 1.25 X 1.1 mm (L X W X H)  
 InGaAlP Technology  
 Reflow soldering is possible  
 Standard embossing taping 4 mm pitch : T02 (3000 pcs/reel)

### Applications

Backlight  
 Low-power electronic equipment  
 Personal equipment



### Series Line-Up

Part Number	Color	Material
TLGE1002A	Ultra Bright Yellow Green	InGaAlP
TLOE1002A	Ultra Bright Orange	InGaAlP
TLPGE1002A	Ultra Pure Green	InGaAlP
TLRE1002A	Ultra Bright Red	InGaAlP
TLSE1002A	Ultra Bright High Efficiency Red	InGaAlP
TLYE1002A	Ultra Bright Yellow	InGaAlP

### Maximum Ratings (Ta=25°C)

Part Number	Forward Current I <sub>F</sub>	Reverse Voltage V <sub>R</sub>	Power Dissipation P <sub>D</sub>	Operating Temperature T <sub>opr</sub>	Storage Temperature T <sub>stg</sub>
TLGE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
TLOE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
TLPGE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
TLRE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
TLSE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
TLYE1002A	25	4	60.00	-25 ~ +85	-30 ~ 85
Unit	mA	V	mW	°C	°C

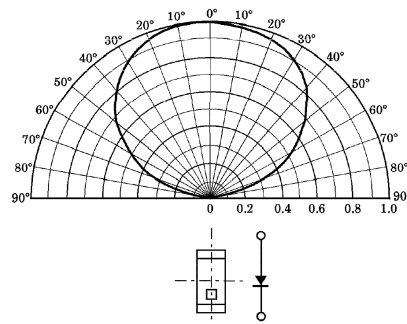
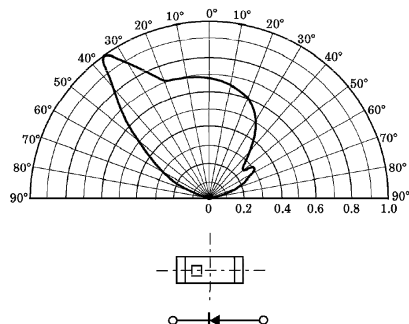
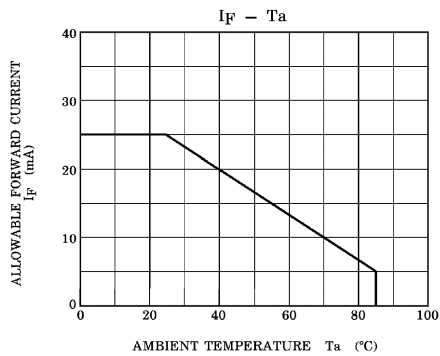
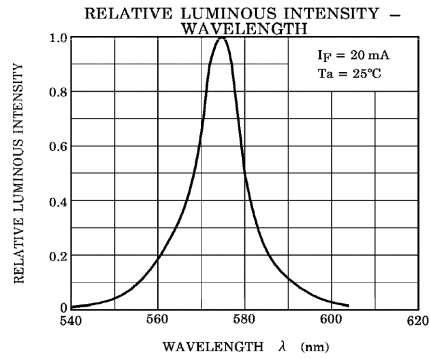
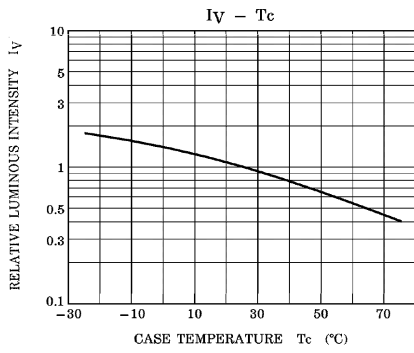
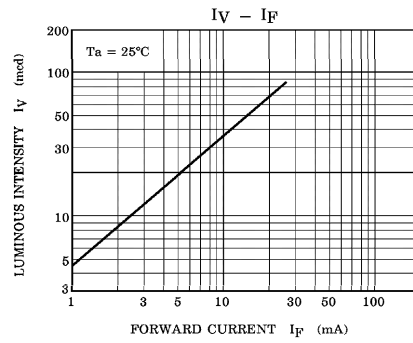
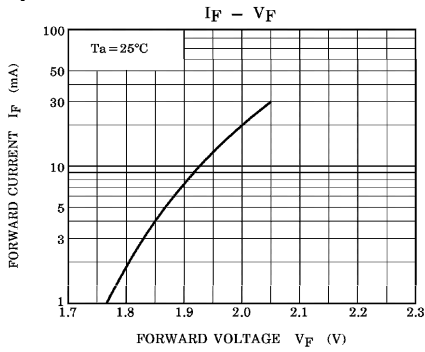
### Electrical and Optical Characteristics (Ta=25°C)

Part Number	PWL nm $\lambda_P$	Material	View Angle $2\theta_{1/2}$	Luminous Intensity $I_v$				Forward Voltage $V_F$				Rev Current $I_R$	
				min.	typ.	max.	IF@	min.	typ.	max.	IF@	max.	VR@
TLGE1002A	574	InGaAlP	120°	27.20	70.00	–	20mA	–	2.00	2.40	20mA	50	4V
TLOE1002A	612	InGaAlP	120°	47.60	150.00	–	20mA	–	2.00	2.40	20mA	50	4V
TLPGE1002A	562	InGaAlP	120°	4.76	18.00	–	20mA	–	2.10	2.40	20mA	50	4V
TLRE1002A	644	InGaAlP	120°	27.20	70.00	–	20mA	–	1.90	2.40	20mA	50	4V
TLSE1002A	623	InGaAlP	120°	47.60	135.00	–	20mA	–	1.90	2.40	20mA	50	4V
TLYE1002A	590	InGaAlP	120°	27.20	105.00	–	20mA	–	2.00	2.40	20mA	50	4V
–	nm	–	deg	mcd				–	V		–	$\mu$ A	–

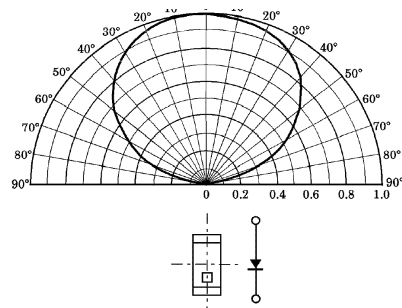
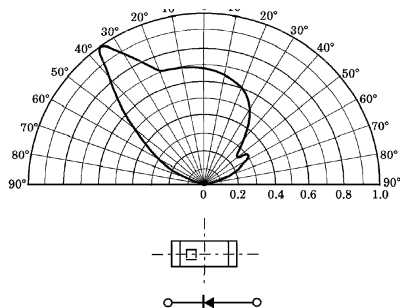
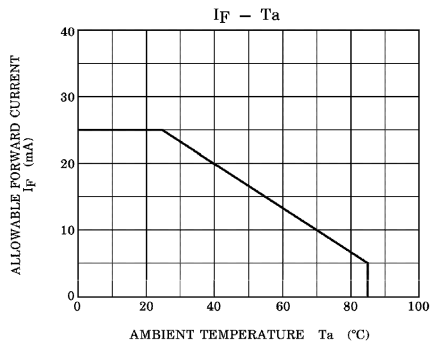
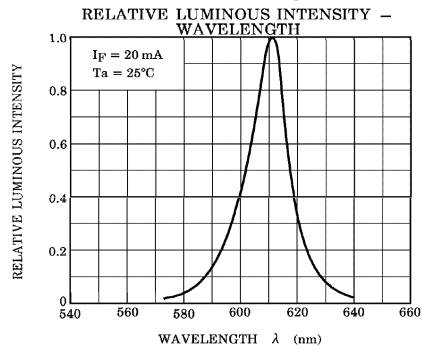
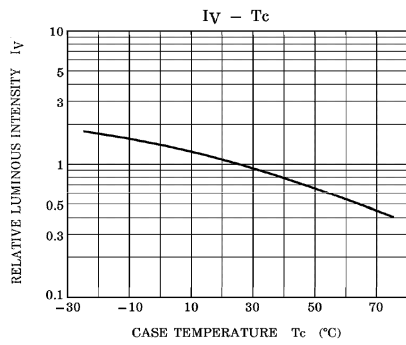
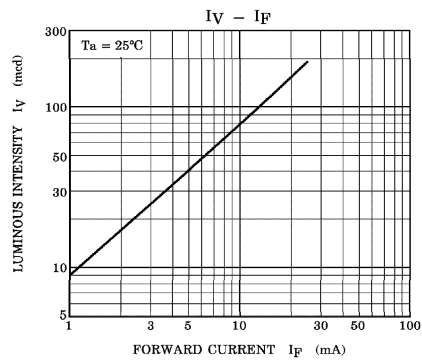
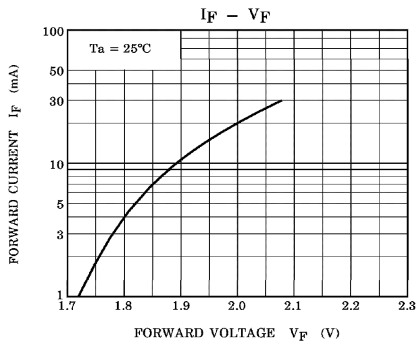
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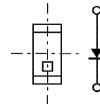
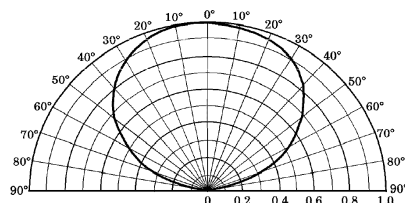
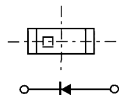
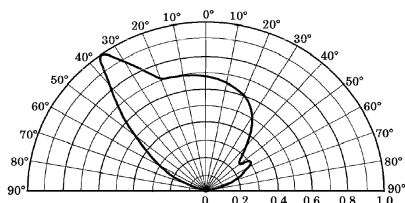
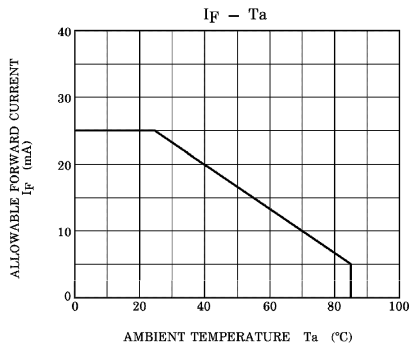
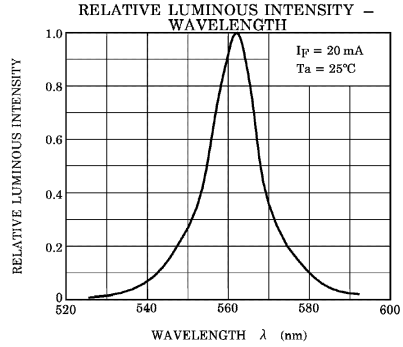
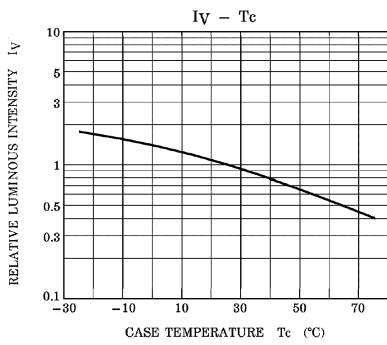
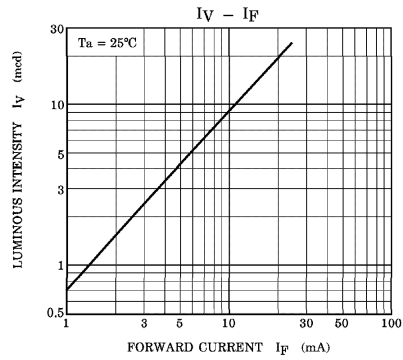
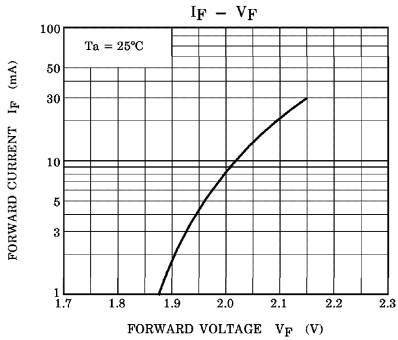
### TLGE1002A Graphs



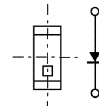
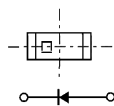
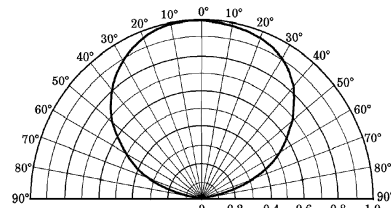
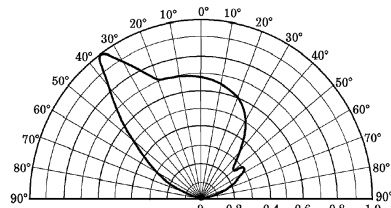
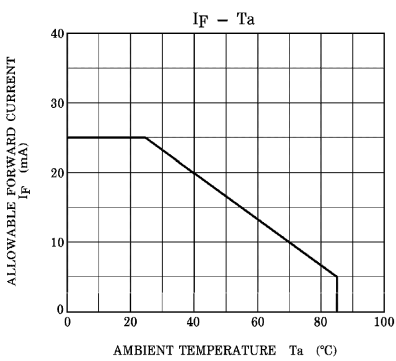
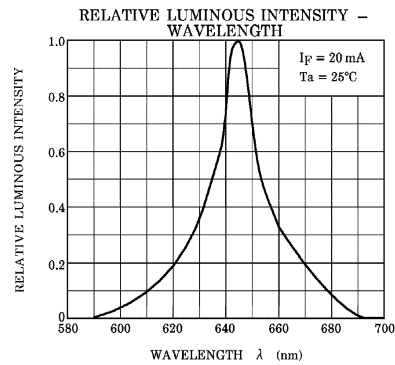
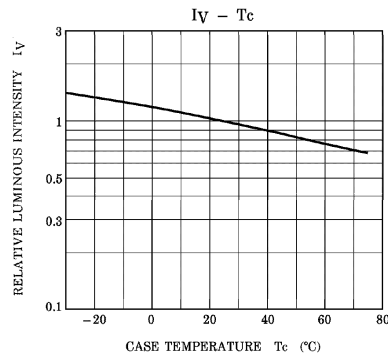
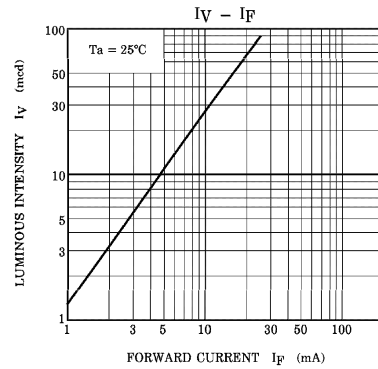
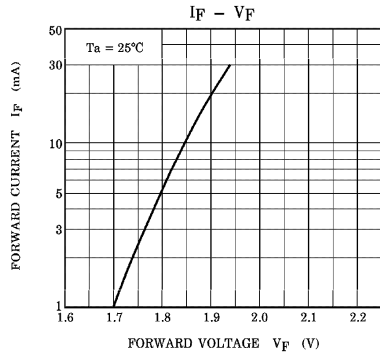
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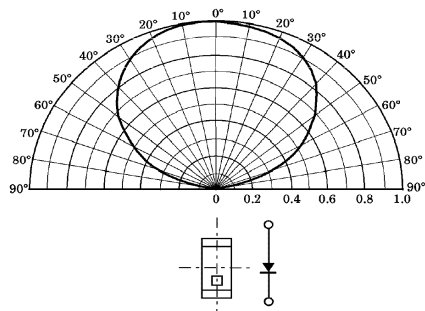
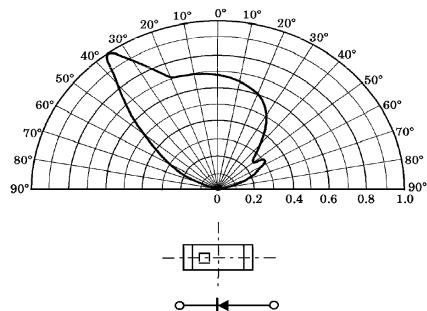
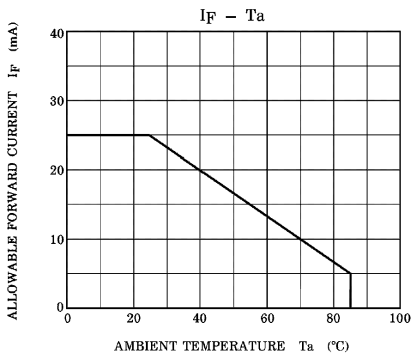
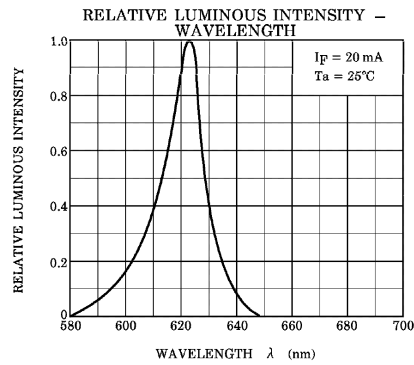
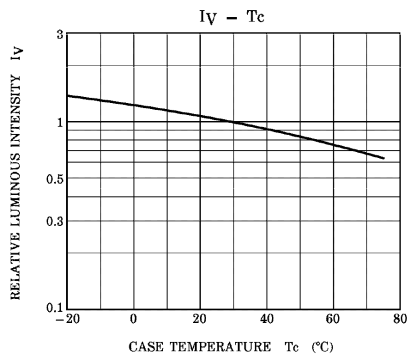
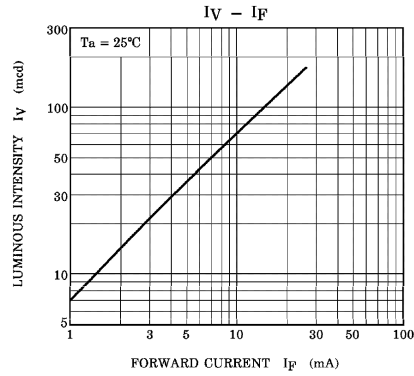
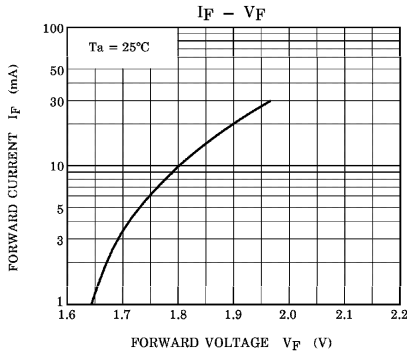
### TLPGE1002A Graphs



### TLRE1002A Graphs



### TLSE1002A Graphs



### TLYE1002A Graphs

