

TOSHIBA

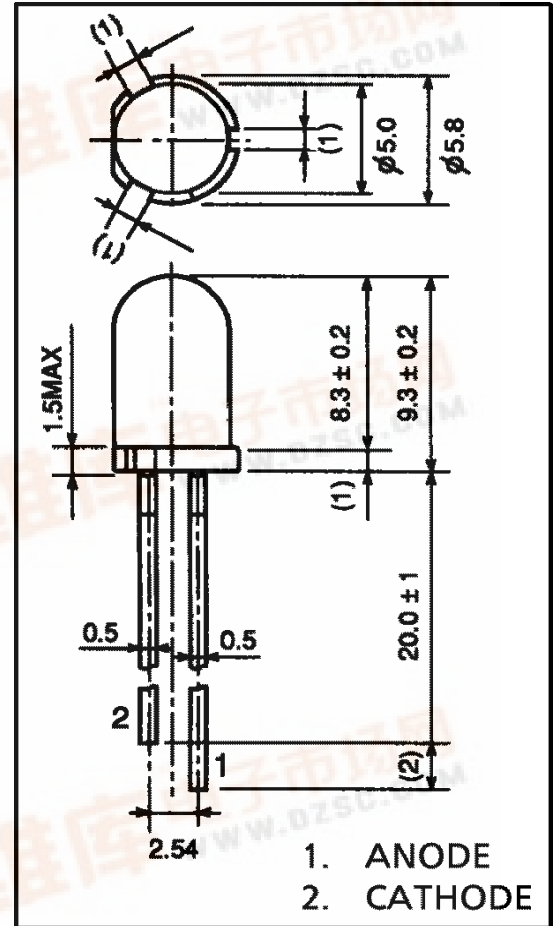
Toshiba TLxH157 Series LEDs

Features

5mm Package
 InGaAIP Technology
 All Plastic Mold Type
 Water Clear Lens
 Fast Response Time, Capable of Pulse Operation
 High Power Luminous Intensity

Applications

Outdoor Message Signboard
 Safety equipment
 Automotive



Series Line-Up

Part Number	Color	Material
TLOH157P	Ultra Bright Orange	InGaAIP
TLRH157P	Ultra Bright Red	InGaAIP
TLRMH157P	Ultra Red	InGaAIP
TLSH157P	Ultra Bright High Efficiency Red	InGaAIP
TLYH157P	Ultra Bright Yellow	InGaAIP

Maximum Ratings (Ta=25°C)

Part Number	Forward Current I _F	Reverse Voltage V _R	Power Dissipation P _D	Operating Temperature T _{opr}	Storage Temperature T _{stg}
TLOH157P	50	4	125.00	-30 ~ 85	-40 ~ 120
TLRH157P	50	4	125.00	-30 ~ 85	-40 ~ 120
TLRMH157P	50	4	125.00	-40 ~ 100	-40 ~ 120
TLSH157P	50	4	125.00	-30 ~ 85	-40 ~ 120
TLYH157P	50	4	125.00	-30 ~ 85	-40 ~ 120
Unit	mA	V	mW	°C	°C

Electrical and Optical Characteristics (Ta=25°C)

Part Number	PWL nm λP	Material	View Angle 2θ _{1/2}	Luminous Intensity I _v				Forward Voltage V _F				Rev Current I _R	
				min.	typ.	max.	IF@	min.	typ.	max.	IF@	max.	VR@
TLOH157P	612	InGaAlP	22°	850.00	2800.00	–	20mA	–	2.10	2.50	20mA	50	4V
TLRH157P	644	InGaAlP	22°	476.00	1700.00	–	20mA	–	1.90	2.50	20mA	50	4V
TLRMH157P	636	InGaAlP	22°	850.00	2240.00	–	20mA	–	2.05	2.50	20mA	50	4V
TLSH157P	623	InGaAlP	22°	850.00	2700.00	–	20mA	–	2.10	2.50	20mA	50	4V
TLYH157P	590	InGaAlP	22°	850.00	2500.00	–	20mA	–	2.10	2.50	20mA	50	4V
–	nm	–	deg	mcd				–	V		–	μA	–

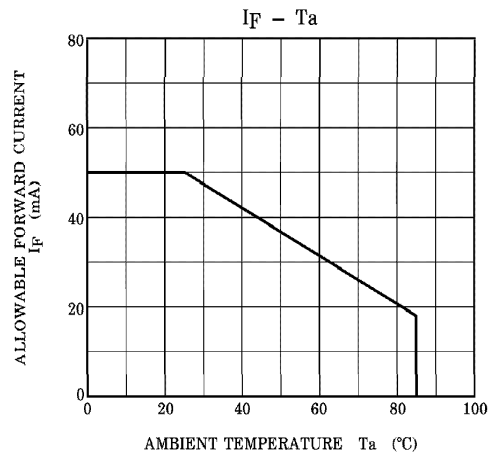
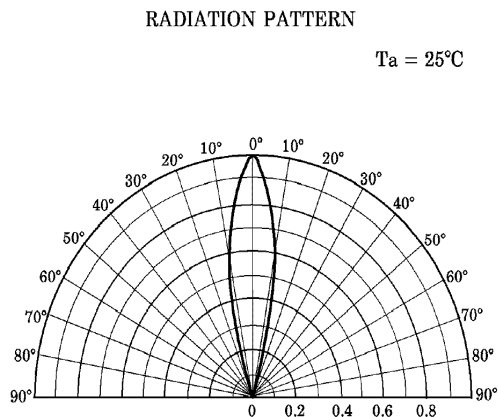
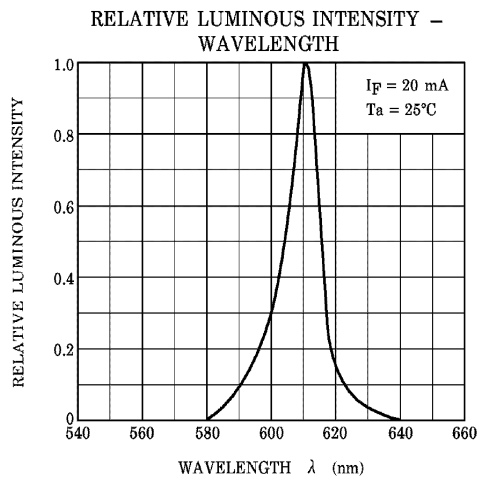
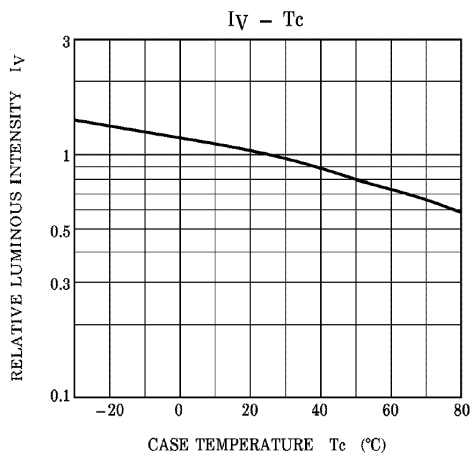
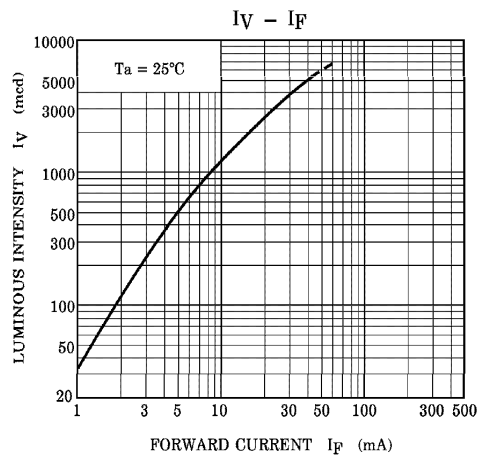
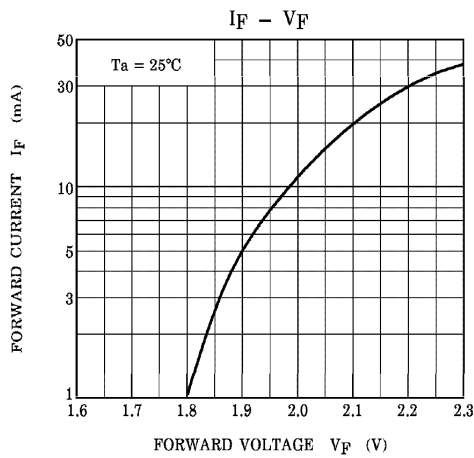
Precautions

- 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.

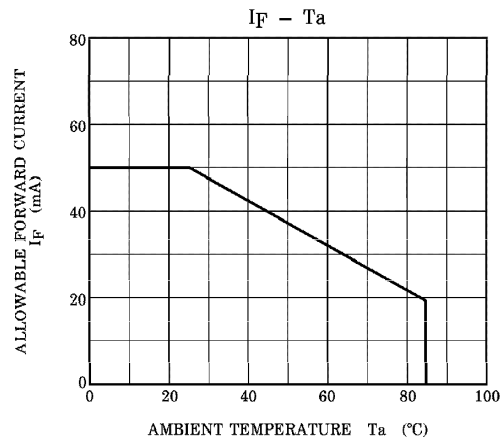
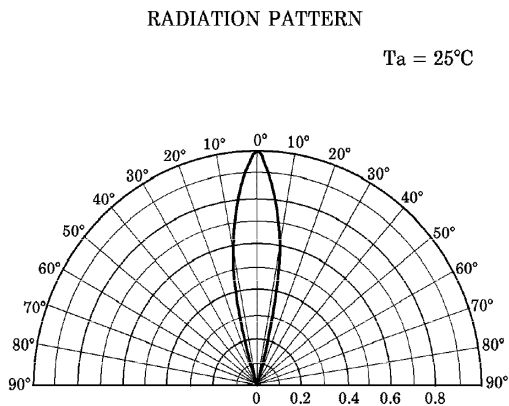
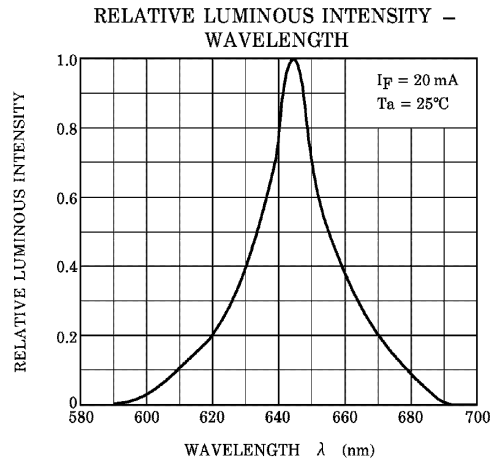
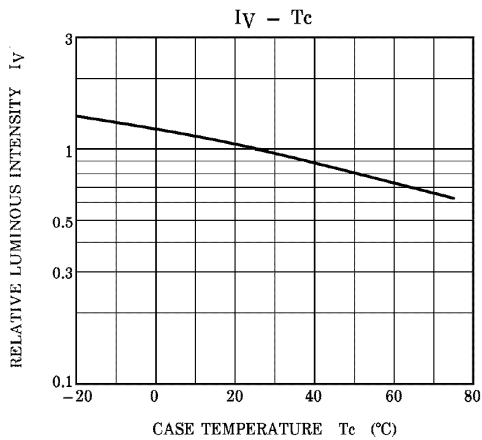
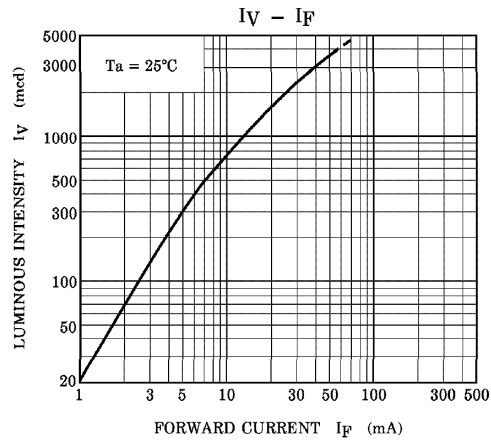
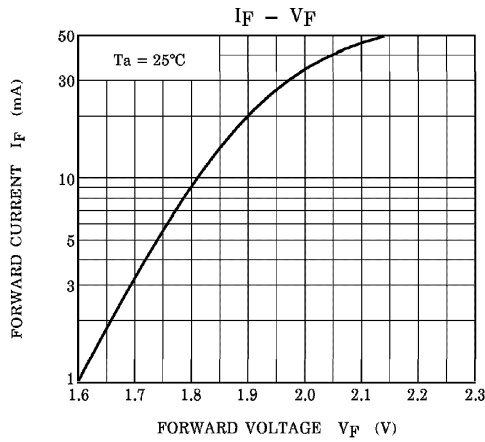
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- In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent TOSHIBA products specifications. Also, please keep in mind the precautions and conditions set forth in the "Handling Guide for Semiconductor Devices," or "TOSHIBA Semiconductor Reliability Handbook" etc..
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- Gallium arsenide (GaAs) is a substance used in the products described in this document. GaAs dust and fumes are toxic. Do not break, cut or pulverize the product, or use chemicals to dissolve them. When disposing of the products, follow the appropriate regulations. Do not dispose of the products with other industrial waste or with domestic garbage.
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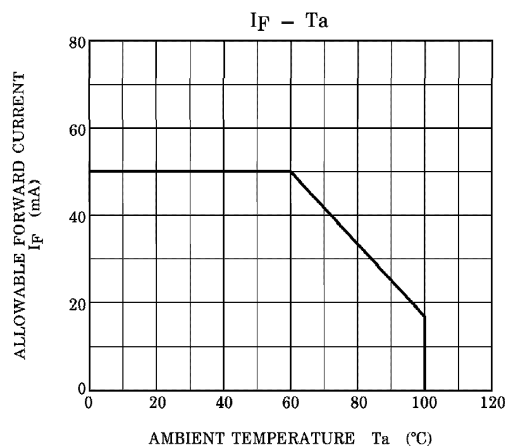
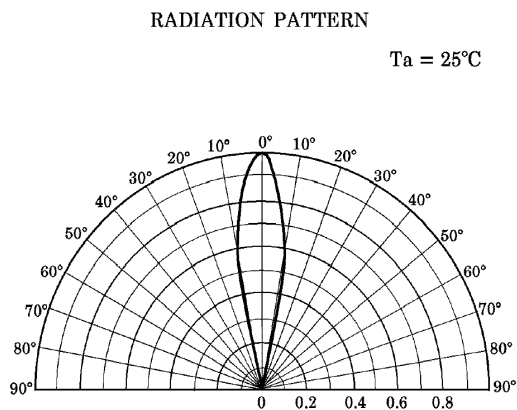
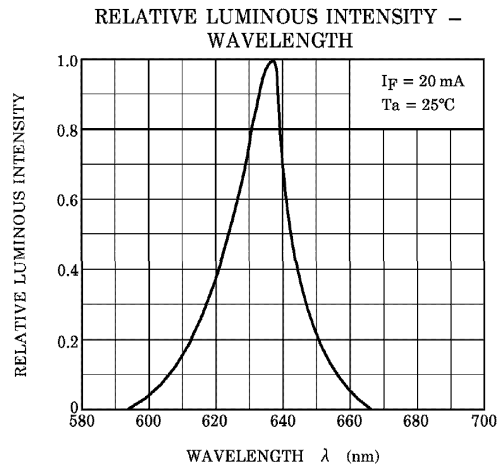
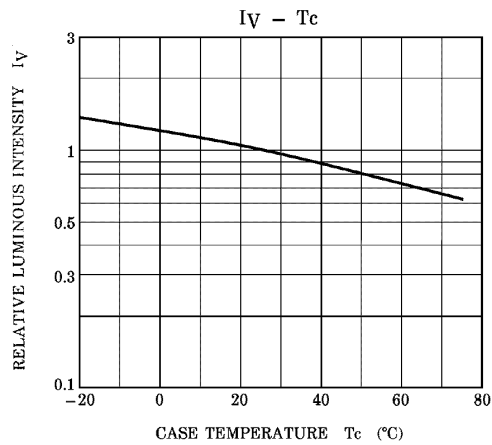
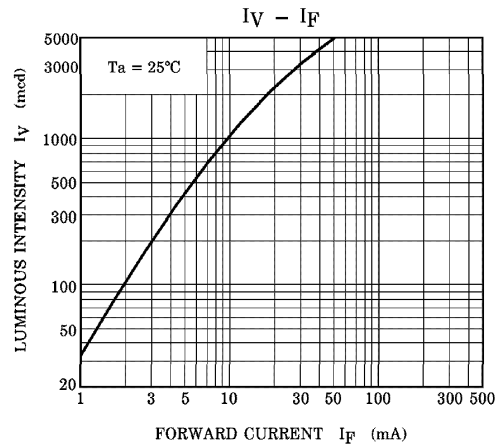
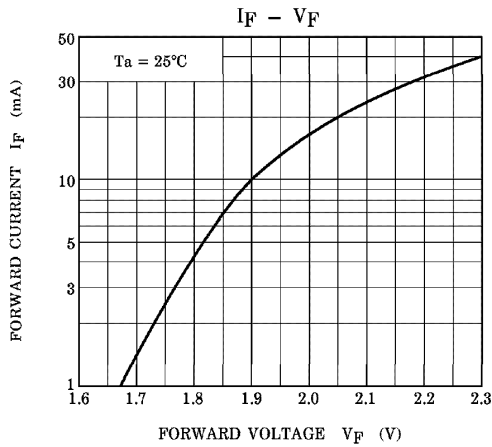
TLOH157P Graphs



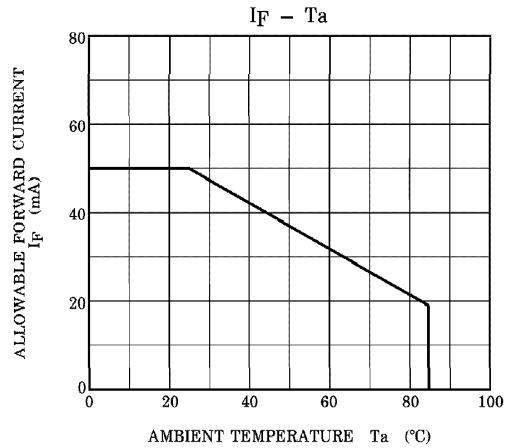
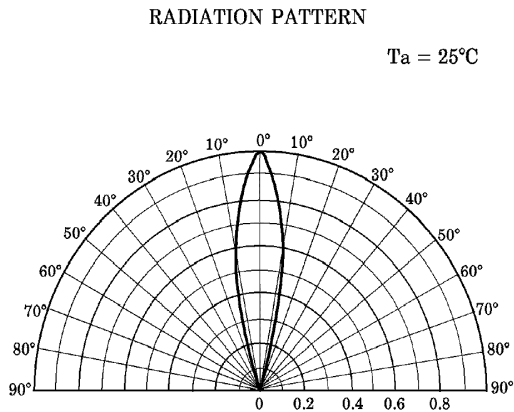
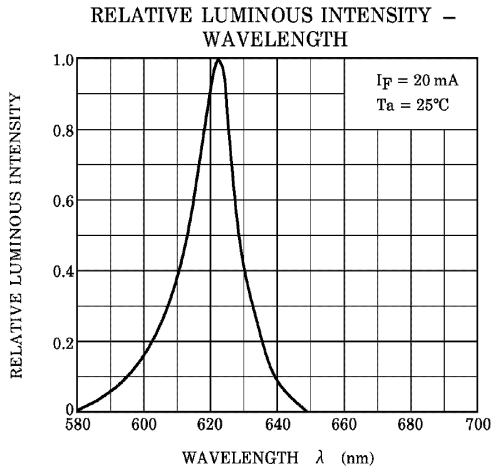
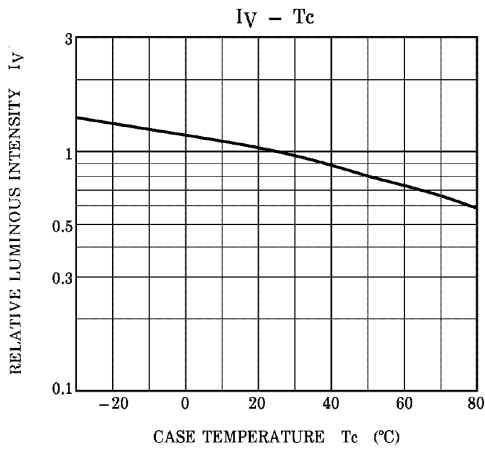
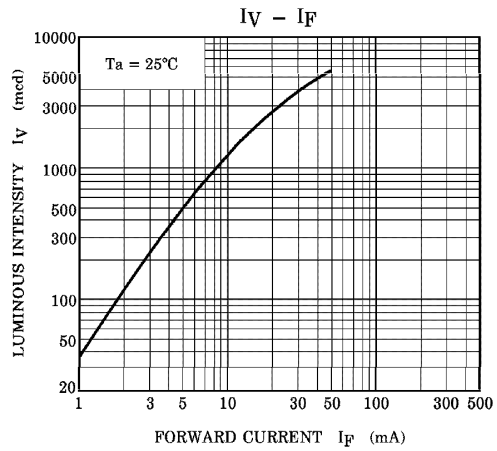
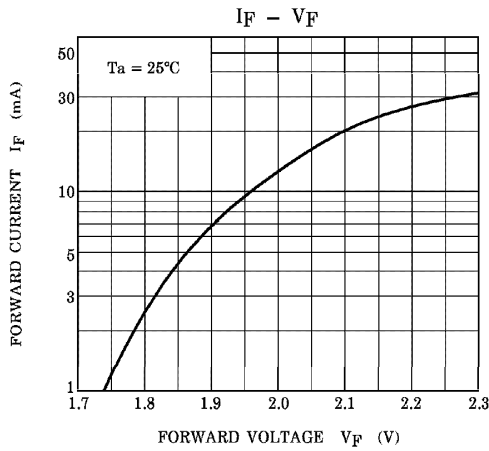
TLRH157P Graphs



TLRMH157P Graphs



TLSH157P Graphs



TLYH157P Graphs

