

TOSHIBA InGaAlP LED

**TLRE53T, TLRME53T, TLSE53T, TLOE53T
 TLYE53T, TLGE53T, TLPGE53T**

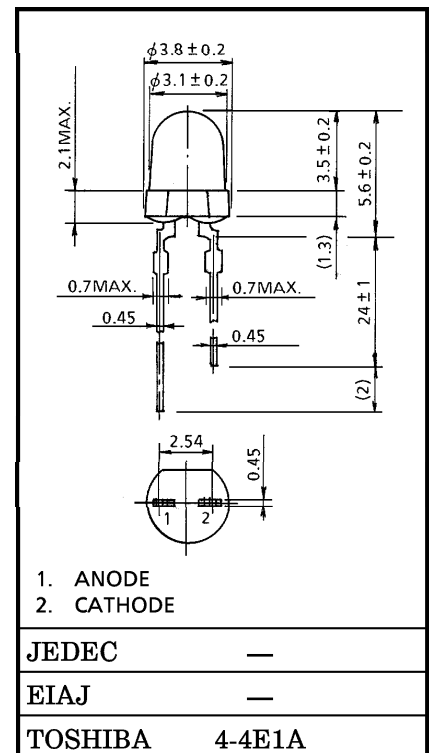
PANEL CIRCUIT INDICATOR

Unit in mm

- 3 mm Package
- InGaAlP Technology
- All Plastic Mold Type
- Transparent Lens
- High Intensity Light Emission
- Excellent Low Current Light Output
- Applications: Outdoor Message Signboards, Safety equipment, Automotive, Security Equipment

LINE-UP

PRODUCT NAME	COLOR	MATERIAL
TLRE53T	Red	InGaAlP
TLRME53T	Red	
TLSE53T	Red	
TLOE53T	Orange	
TLYE53T	Yellow	
TLGE53T	Green	
TLPGE53T	Pure Green	



Weight : 0.14 g

MAXIMUM RATINGS (Ta = 25°C)

PRODUCT NAME	FORWARD CURRENT I _F (mA)	REVERSE VOLTAGE V _R (V)	POWER DISSIPATION P _D (mW)	OPERATING TEMPERATURE T _{opr} (°C)	STORAGE TEMPERATURE T _{stg} (°C)
TLRE53T	50	4	120	-40~100	-40~120
TLRME53T	50	4	120	-40~100	-40~120
TLSE53T	50	4	120	-40~100	-40~120
TLOE53T	50	4	120	-40~100	-40~120
TLYE53T	50	4	120	-40~100	-40~120
TLGE53T	50	4	120	-40~100	-40~120
TLPGE53T	50	4	120	-40~100	-40~120

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ELECTRICAL AND OPTICAL CHARACTERISTICS (Ta = 25°C)

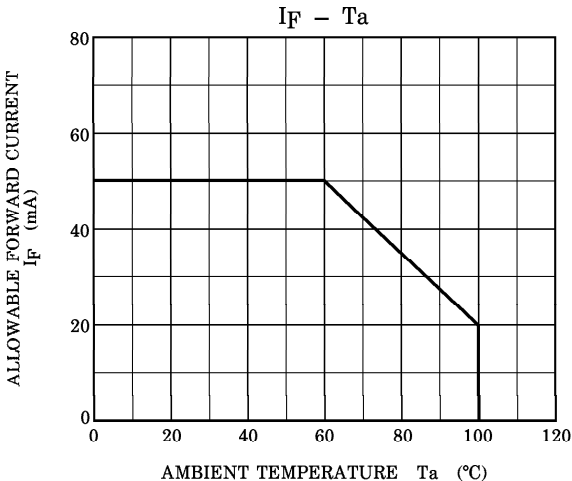
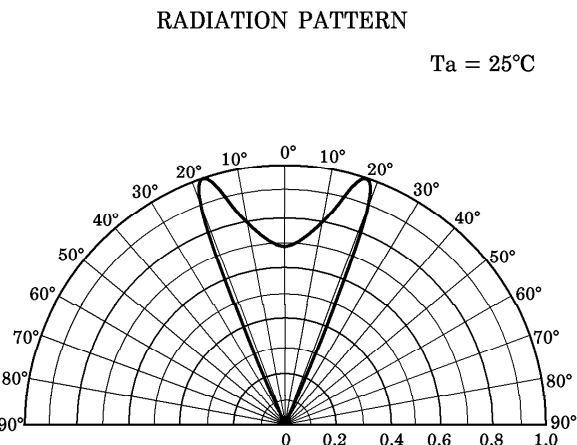
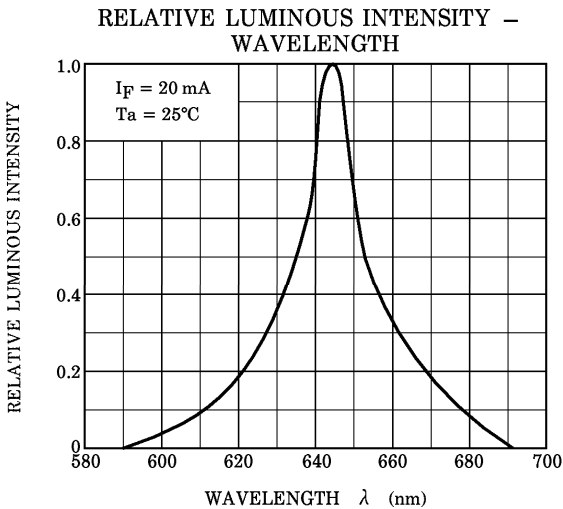
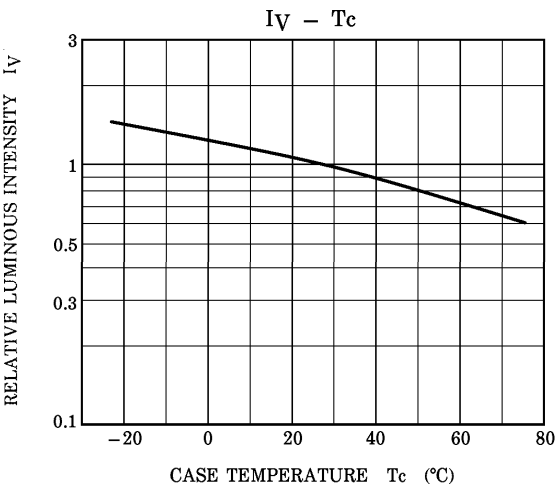
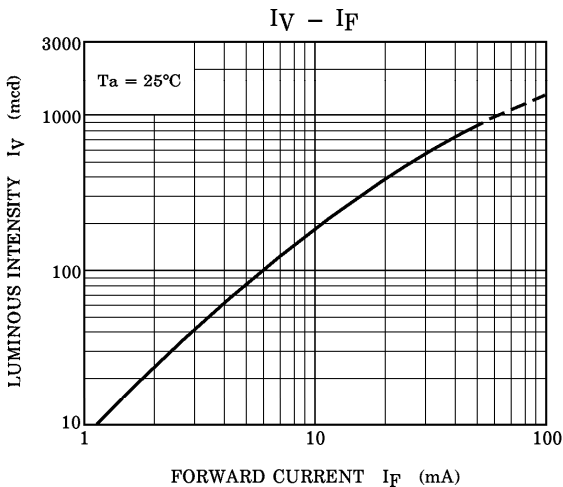
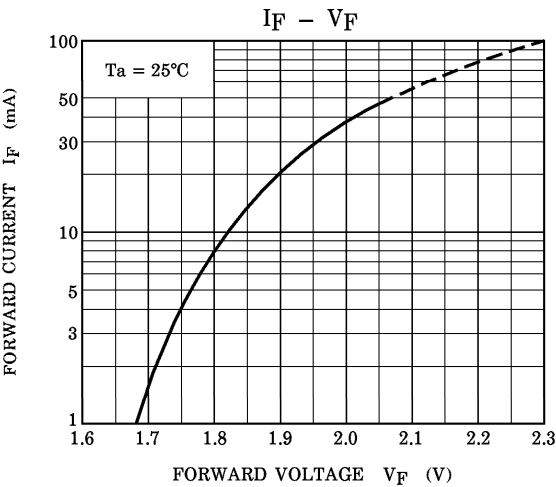
PRODUCT NAME	TYP. EMISSION WAVELENGTH				LUMINOUS INTENSITY I _V			FORWARD VOLTAGE V _F			REVERSE CURRENT I _R	
	λ _d	λ _p	Δλ	I _F	MIN	TYP.	I _F	TYP.	MAX	I _F	MAX	V _R
TLRE53T	630	(644)	20	20	153	400	20	1.9	2.4	20	50	4
TLRME53T	626	(636)	23	20	272	600	20	1.9	2.4	20	50	4
TLSE53T	613	(623)	20	20	272	800	20	1.9	2.4	20	50	4
TLOE53T	605	(612)	20	20	272	1000	20	2.0	2.4	20	50	4
TLYE53T	587	(590)	17	20	272	800	20	2.0	2.4	20	50	4
TLGE53T	571	(574)	17	20	153	400	20	2.0	2.4	20	50	4
TLPGE53T	558	(562)	14	20	47.6	130	20	2.1	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

PRECAUTIONS

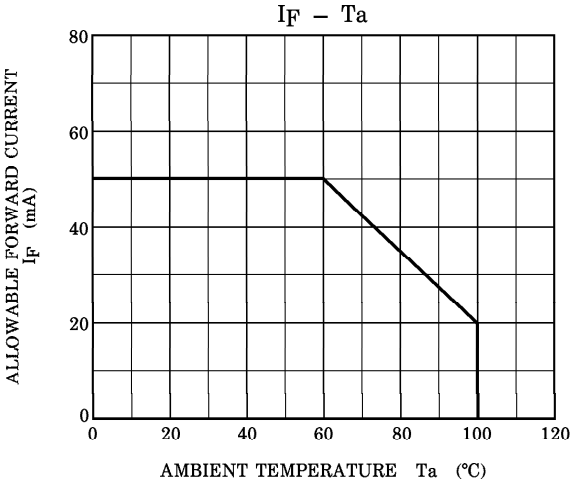
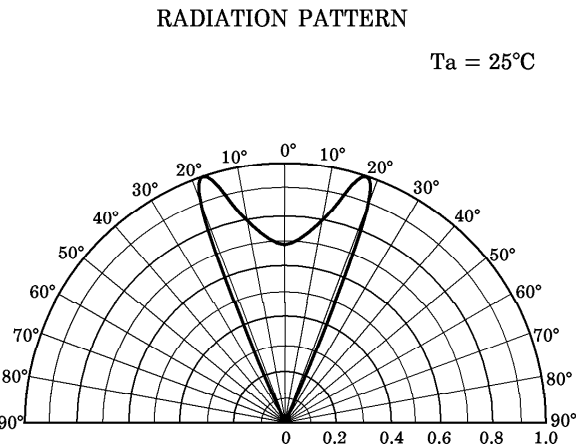
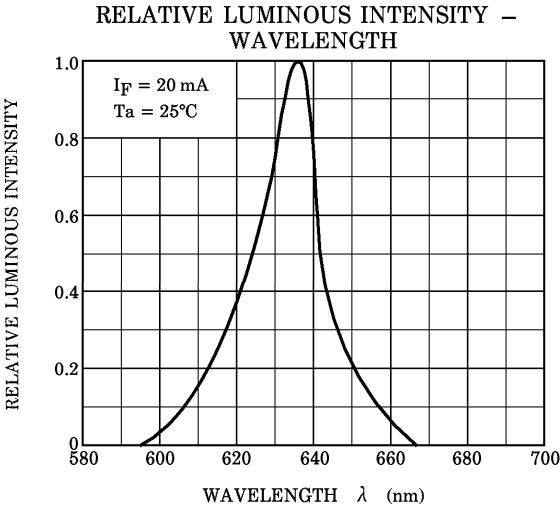
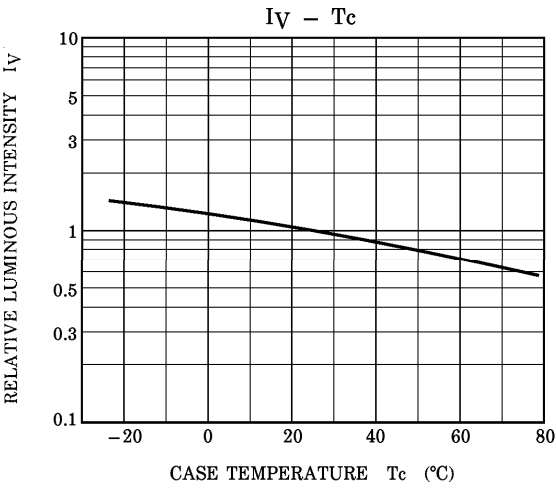
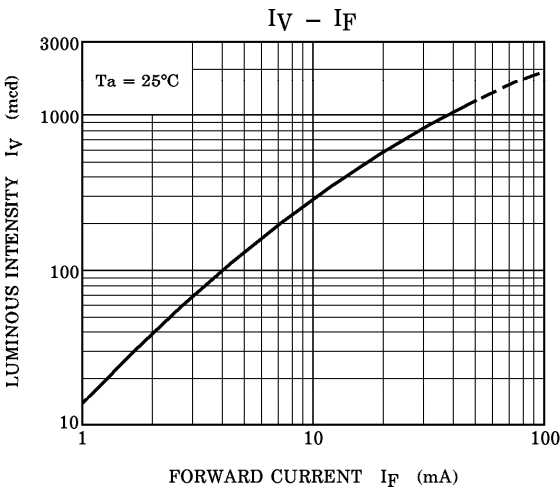
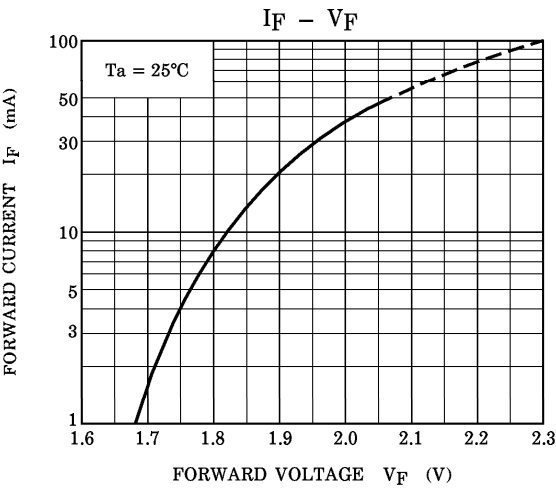
Please be careful of the following:

- 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.

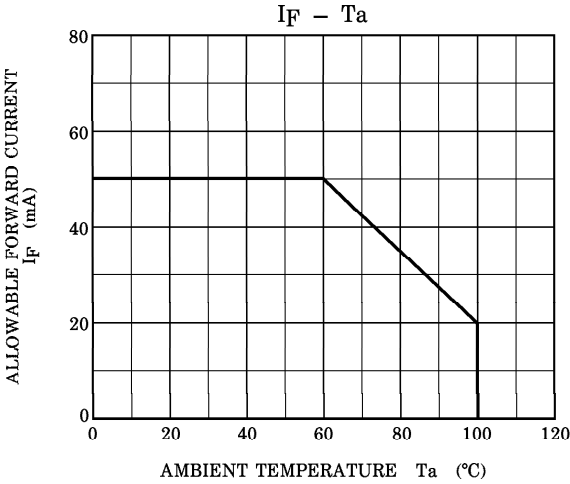
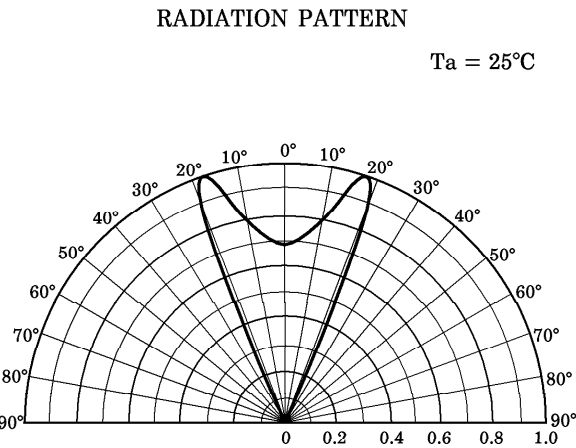
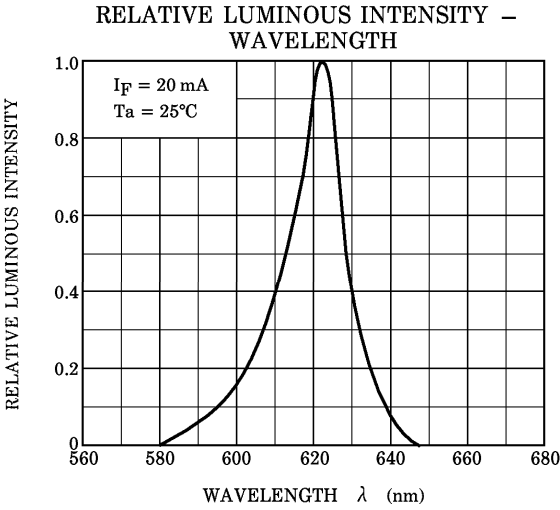
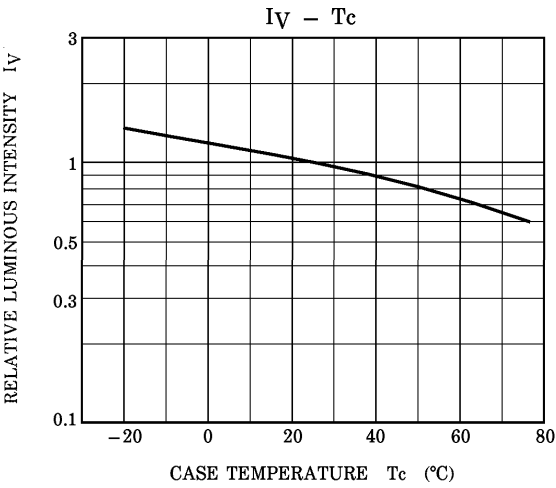
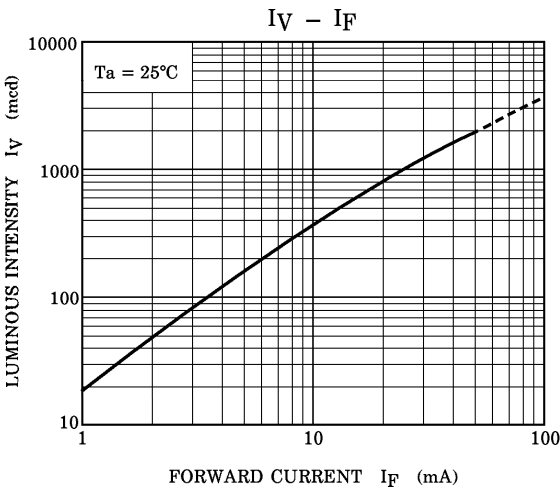
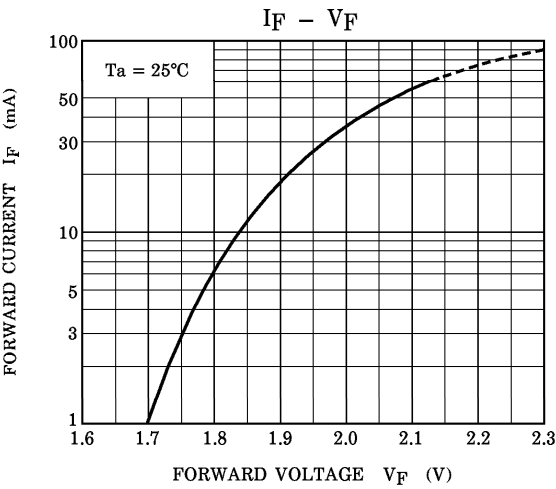
TLRE53T



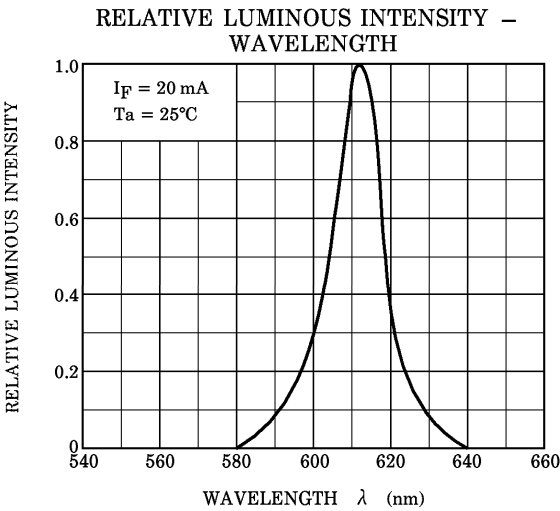
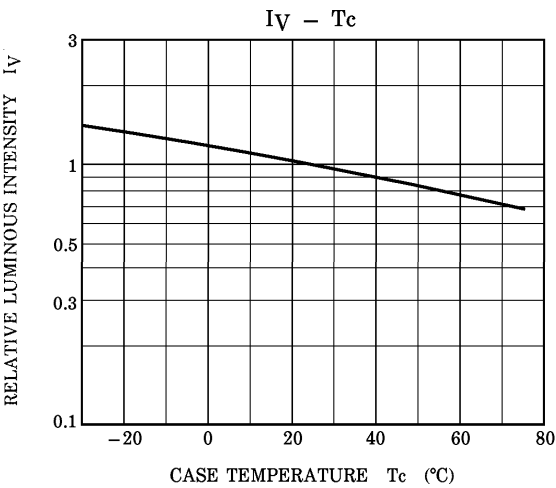
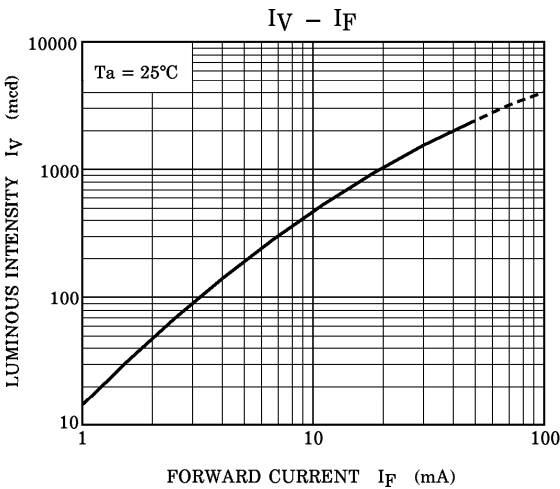
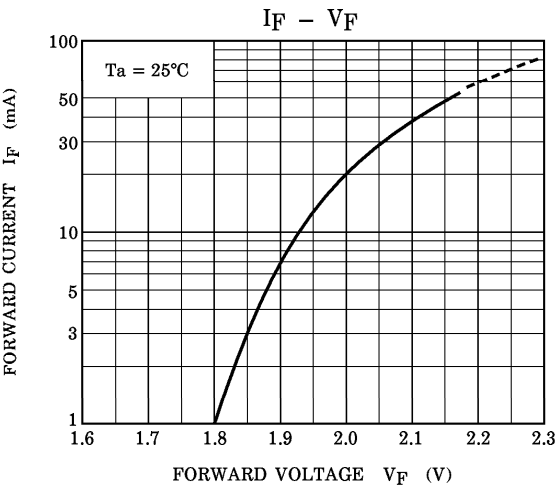
TLRME53T



TLSE53T

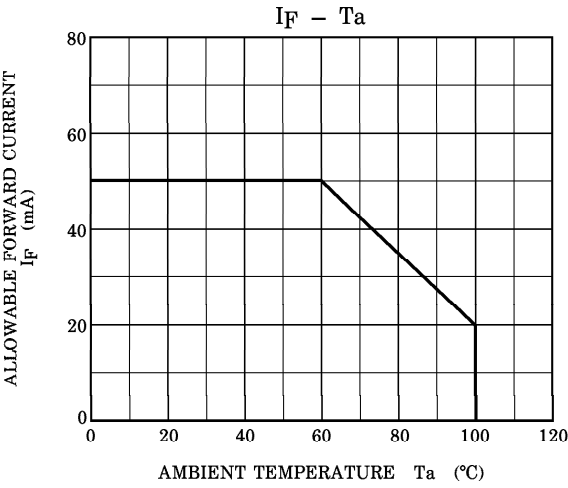
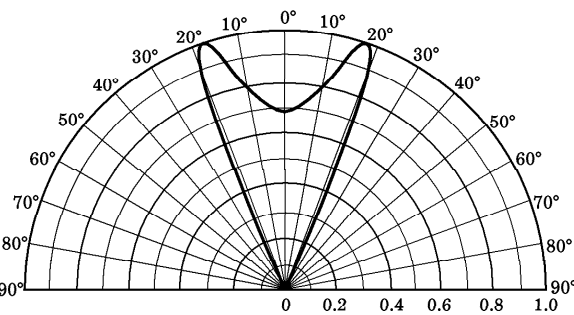


TLOE53T

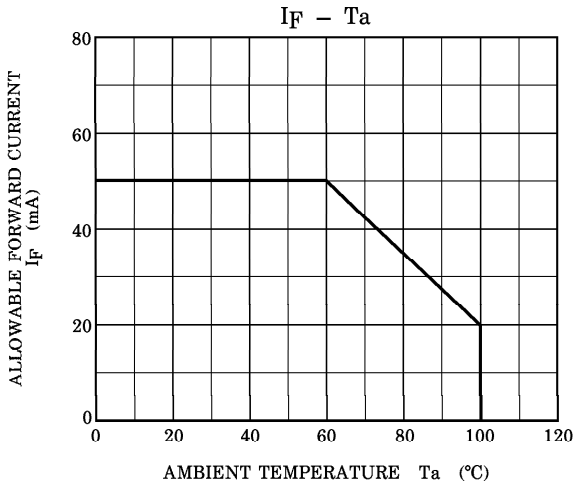
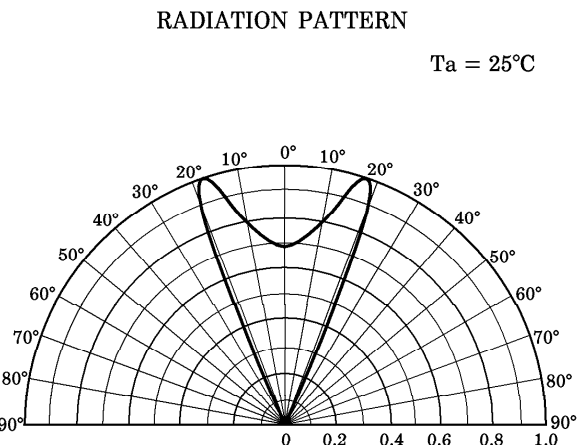
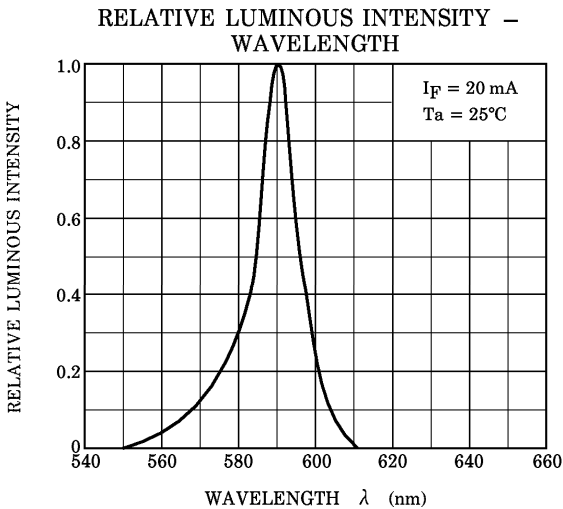
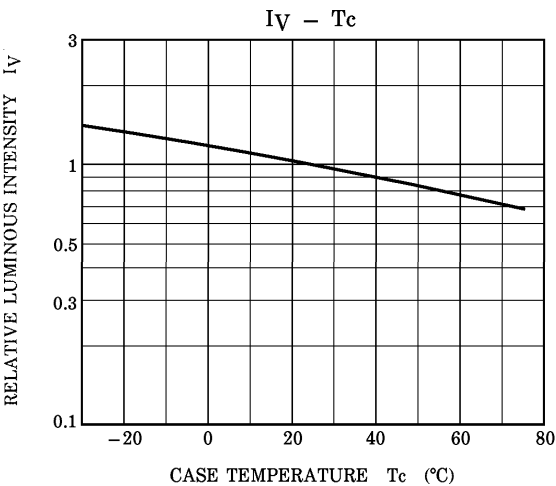
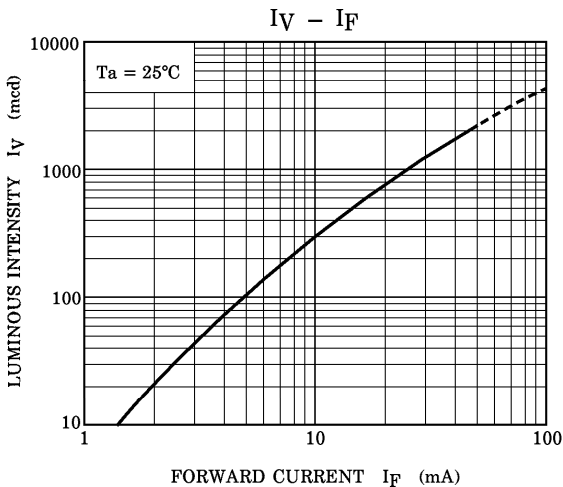
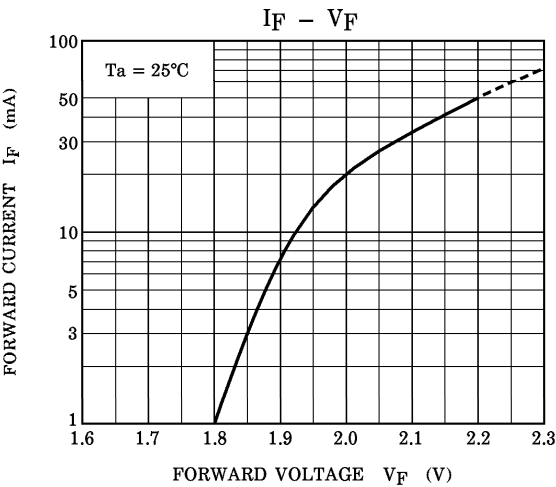


RADIATION PATTERN

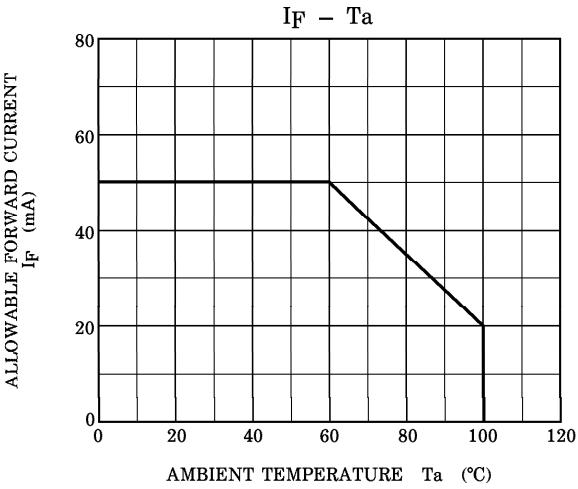
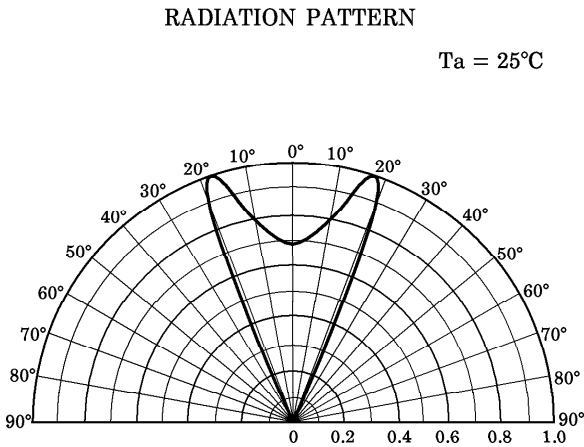
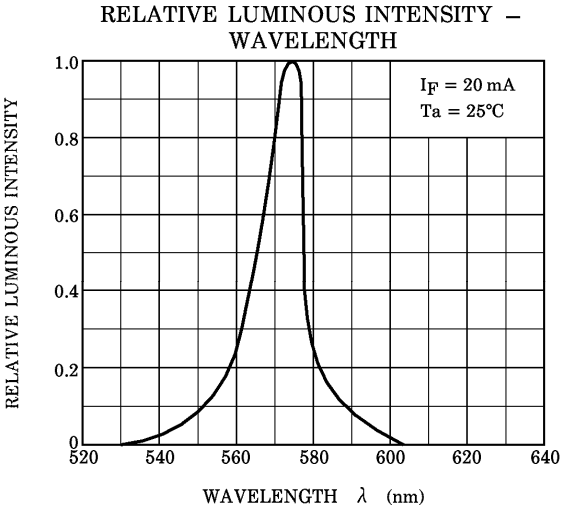
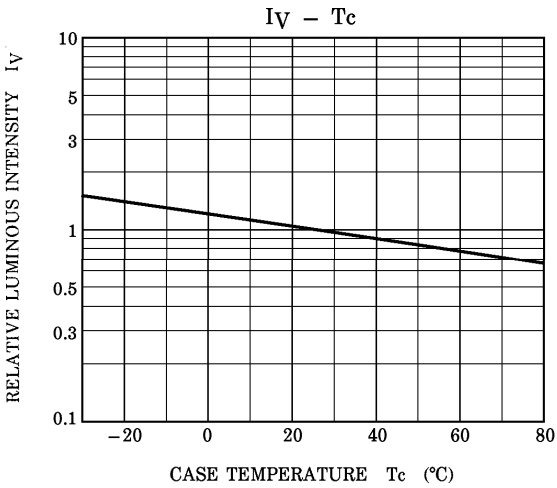
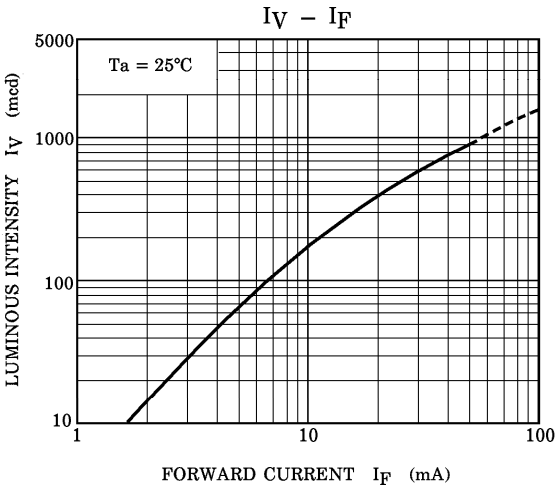
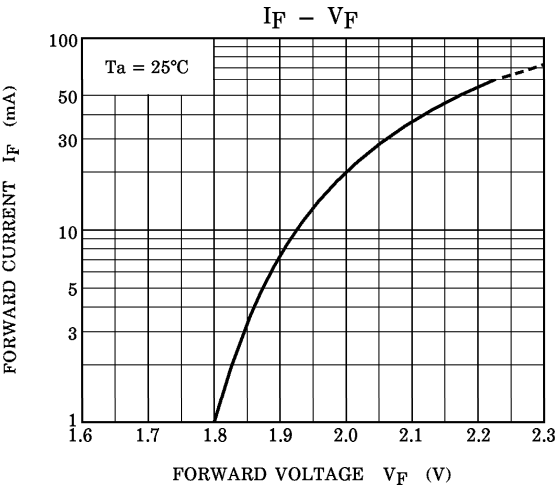
$T_a = 25^\circ\text{C}$



TLYE53T



TLGE53T



TLPGE53T

