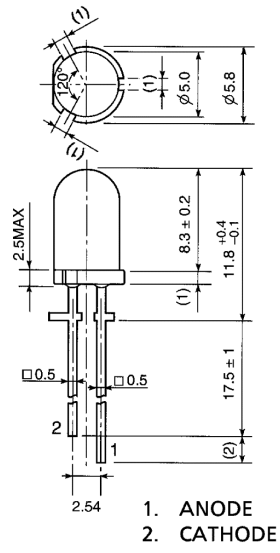
TOSHIBA LED Lamp

TLRE17T,TLRME17T,TLSE17T TLOE17T,TLYE17T

Panel Circuit Indicator

Unit in mm

- 5mm package
- InGaAℓP technology
- All plastic mold type
- Transparent lens
- High intensity light emission
- Excellent low current light output
- Applications: Outdoor message signboards, safety equipment



JEDEC	—
EIAJ	—
TOSHIBA	

Weight: 0.31 g (typ.)

Line–Up

Product Name	Color	Material
TLRE17T	Red	InGaAℓP
TLRME17T	Red	InGaAℓP
TLSE17T	Red	InGaAℓP
TLOE17T	Orange	InGaAℓP
TLYE17T	Yellow	InGaAℓP

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)
TLRE17T	50	4	120	−40~100	−40~120
TLRME17T	50	4	120		
TLSE17T	50	4	120		
TLOE17T	50	4	120		
TLYE17T	50	4	120		

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	$\Delta\lambda$	I_F	Min	Typ.	I_F	Typ.	Max	I_F	Max	V_R
TLRE17T	630	(644)	20	20	476	1500	20	1.9	2.4	20	50	4
TLRME17T	626	(636)	23	20	850	2400	20	1.9	2.4	20	50	4
TLSE17T	613	(623)	20	20	850	3000	20	1.9	2.4	20	50	4
TLOE17T	605	(612)	20	20	1530	4500	20	2.0	2.4	20	50	4
TLYE17T	587	(590)	17	20	850	3000	20	2.0	2.4	20	50	4
Unit	nm			mA	mcd		mA	V		mA	μA	V

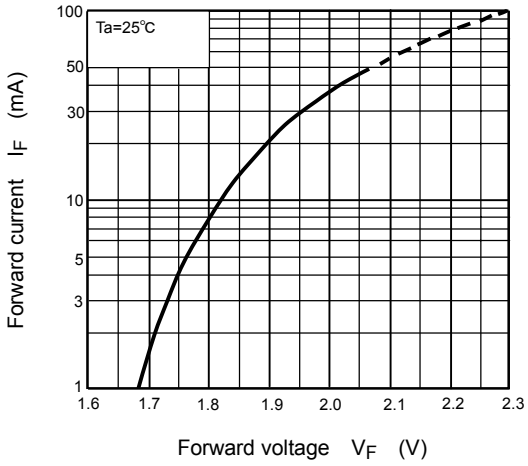
Precautions

Please be careful of the following:

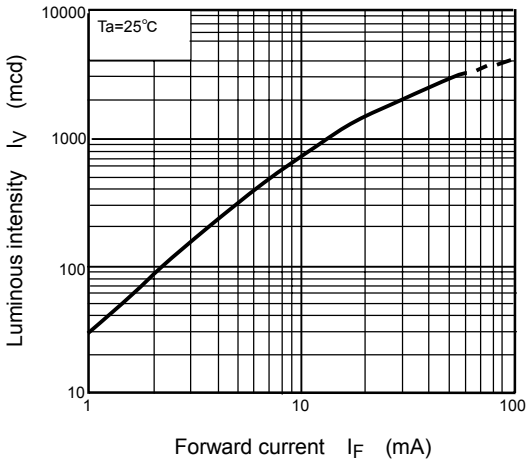
- Soldering temperature: 260°C max, soldering time: 3s max
  (Soldering portion of lead: Below the lead stopper)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible 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.

TLRE17T

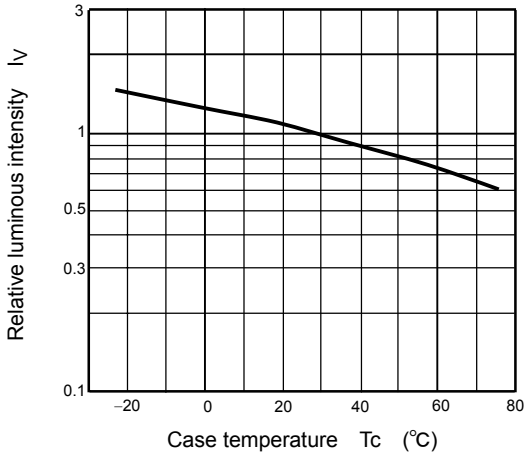
$I_F - V_F$



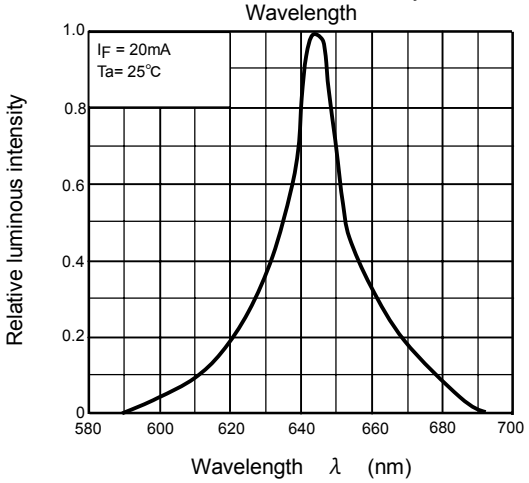
$I_V - I_F$



$I_V - Tc$

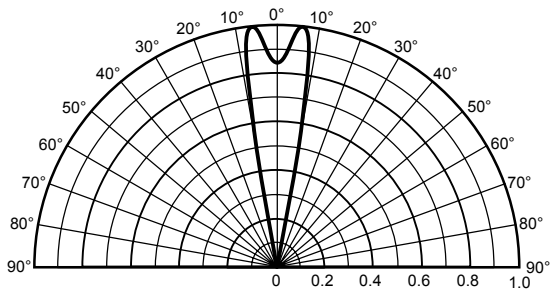


Relative Luminous Intensity – Wavelength

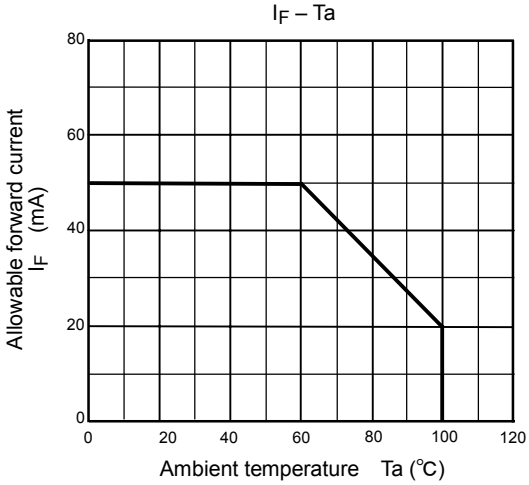


Radiation Pattern

Ta = 25℃

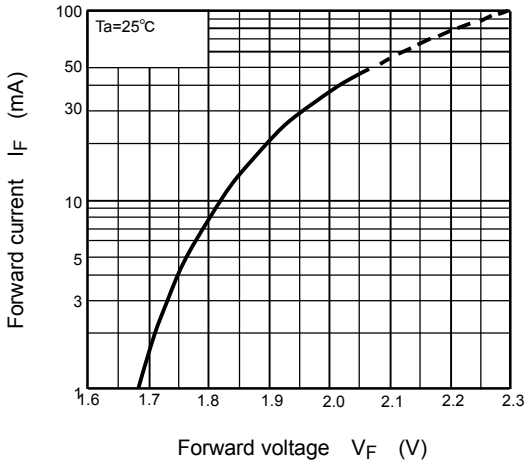


$I_F - Ta$

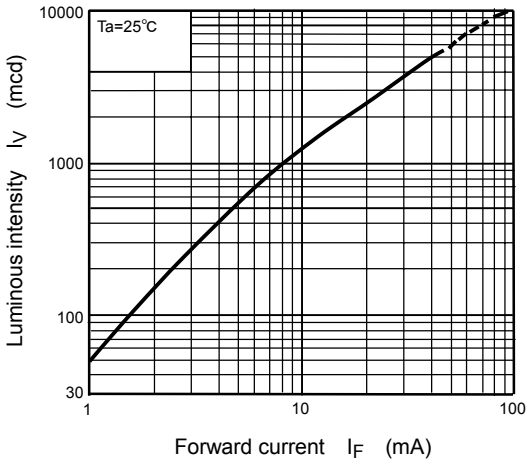


TLRME17T

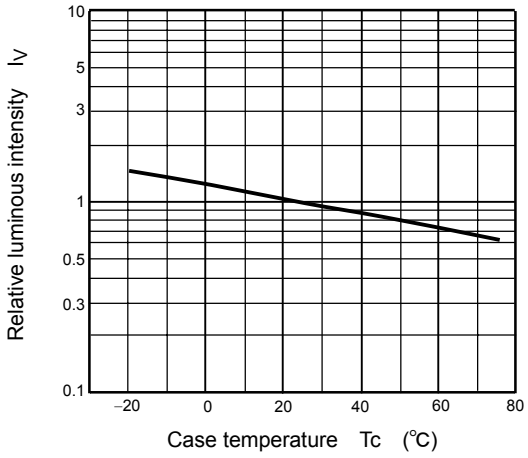
$I_F - V_F$



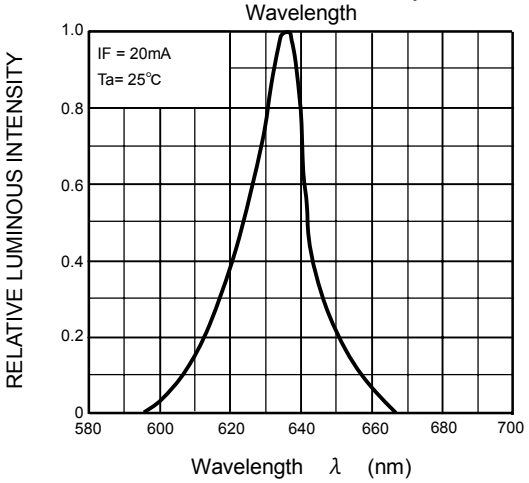
$I_V - I_F$



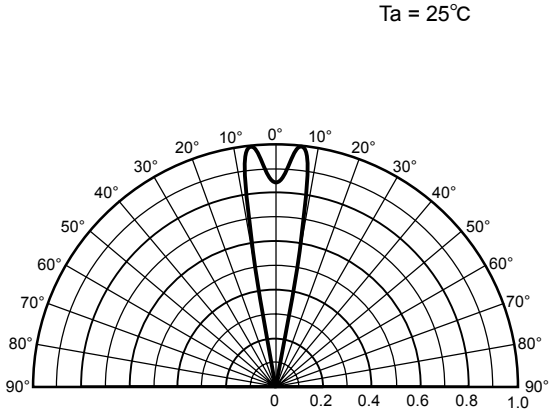
$I_V - Tc$



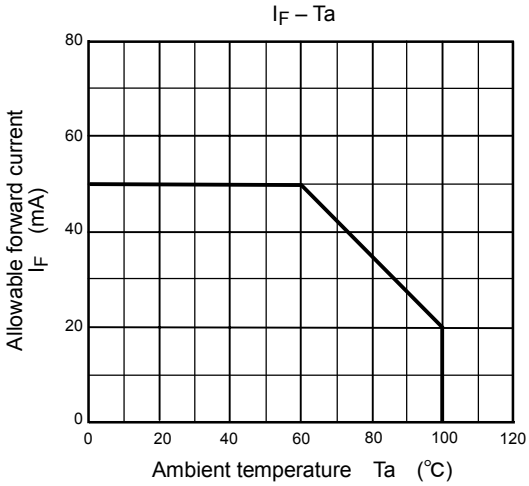
Relative Luminous Intensity – Wavelength



Radiation Pattern

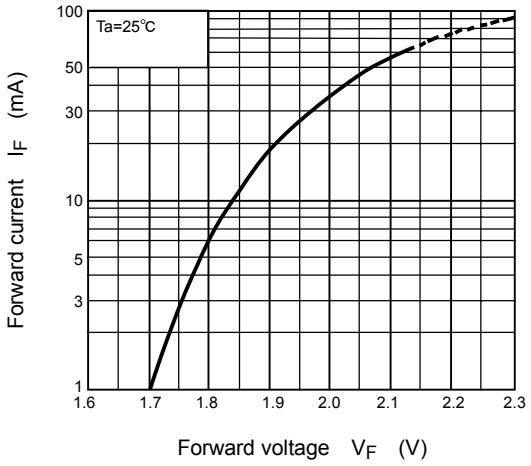


$I_F - Ta$

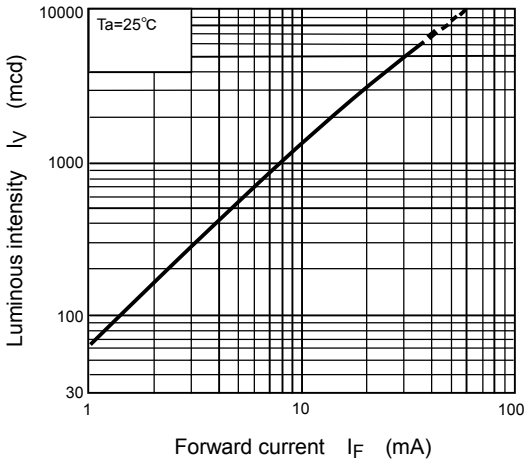


TLSE17T

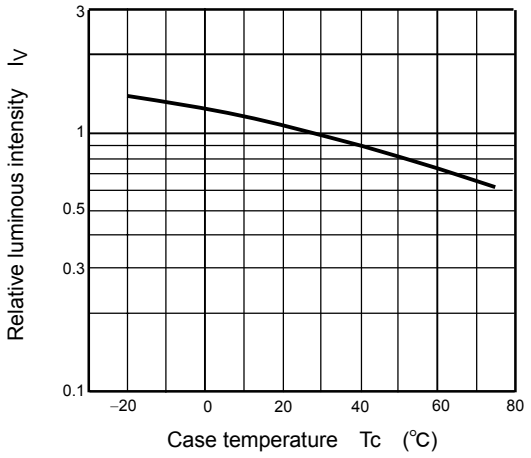
$I_F - V_F$



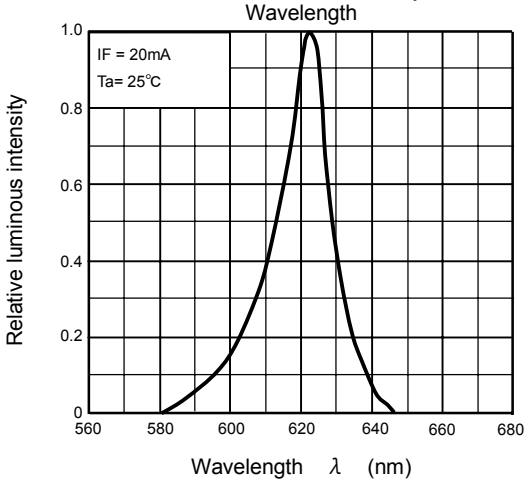
$I_V - I_F$



$I_V - Tc$

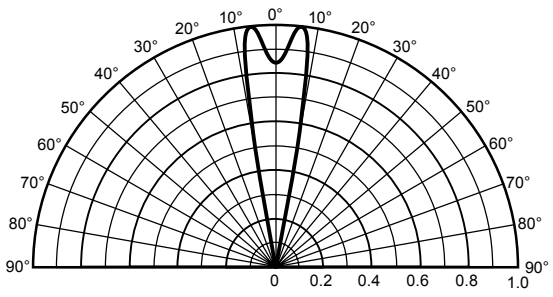


Relative Luminous Intensity – Wavelength

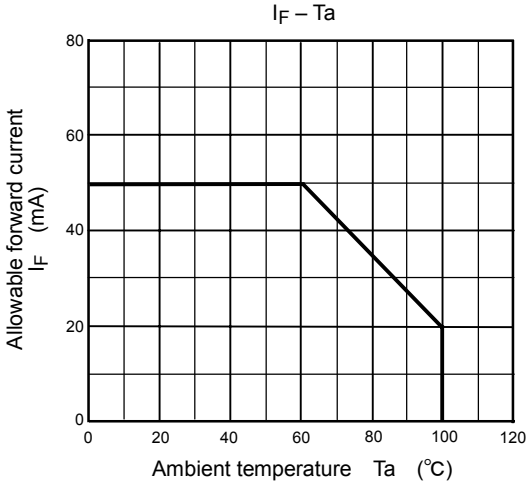


Radiation Pattern

Ta = 25℃

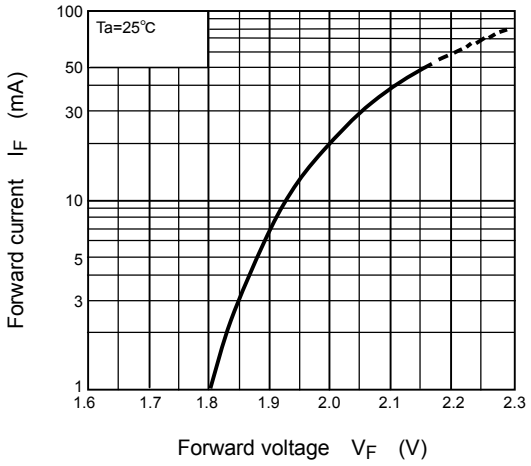


$I_F - Ta$

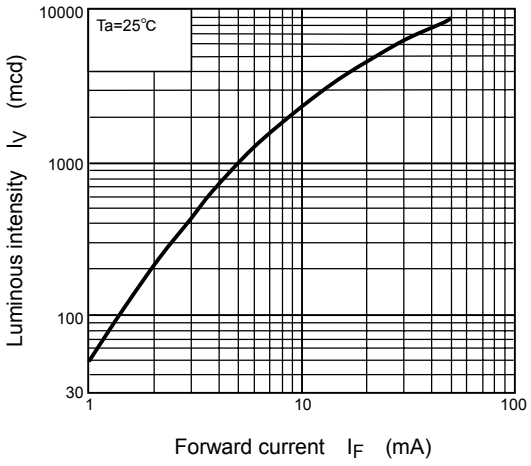


TLOE17T

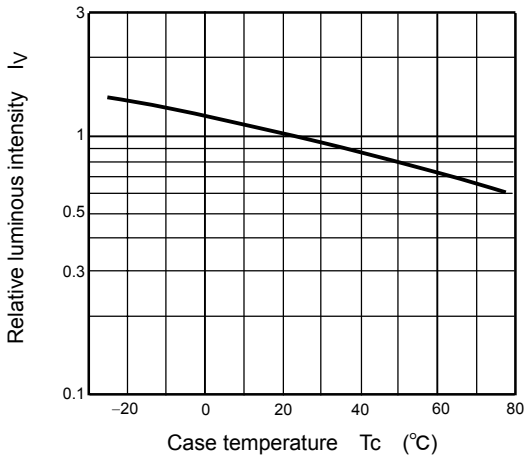
$I_F - V_F$



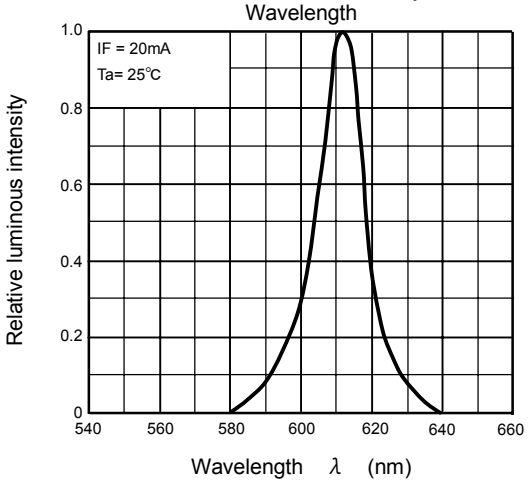
$I_V - I_F$



$I_V - Tc$

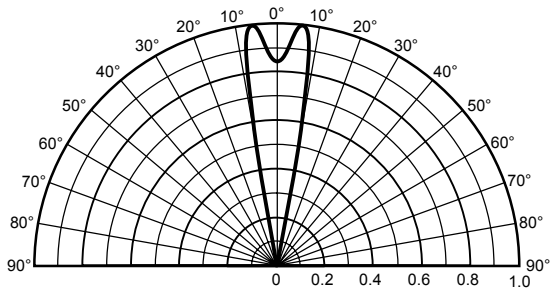


Relative Luminous Intensity – Wavelength

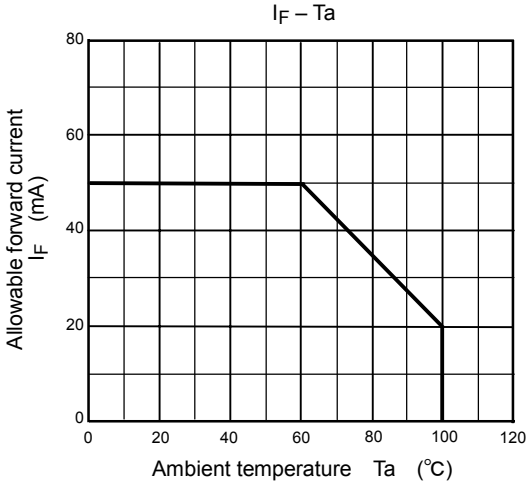


Radiation Pattern

Ta = 25℃

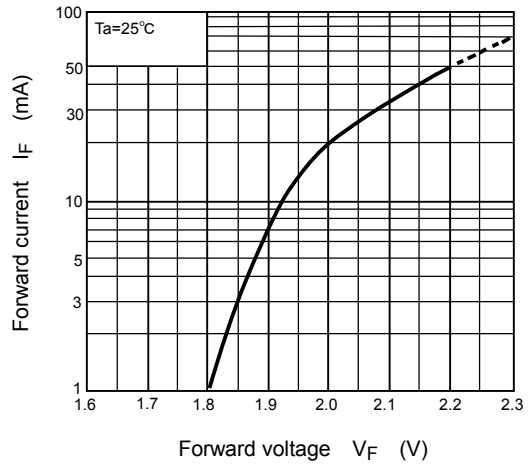


$I_F - Ta$

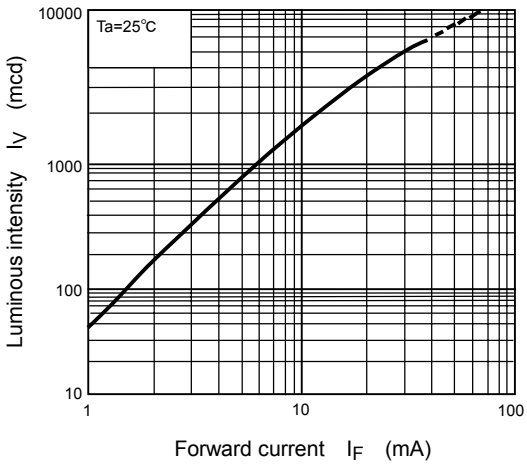


TLYE17T

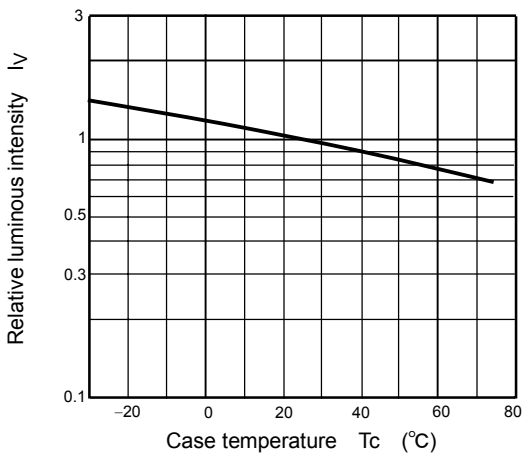
$I_F - V_F$



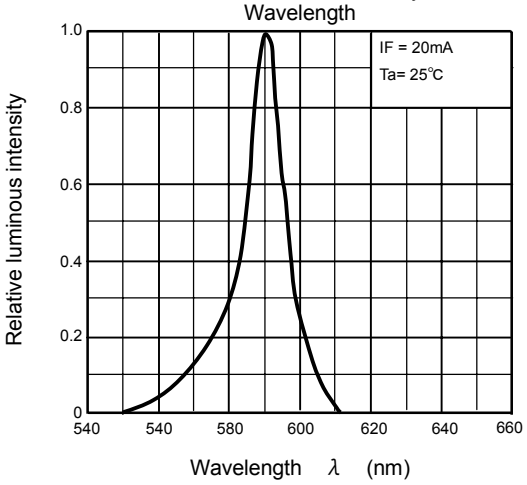
$I_V - I_F$



$I_V - Tc$

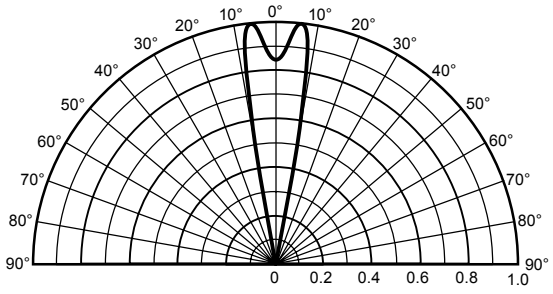


Relative Luminous Intensity – Wavelength

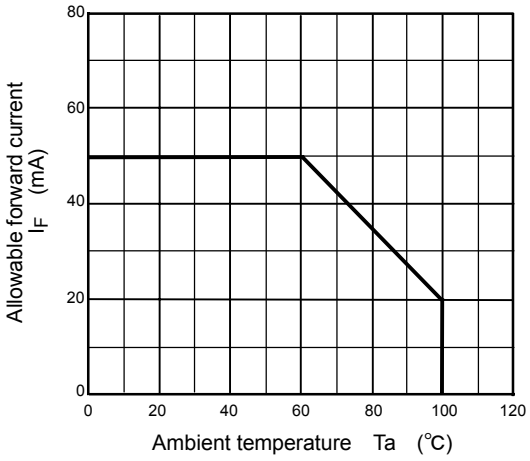


Radiation Pattern

Ta = 25℃



$I_F - Ta$



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000707EAC

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