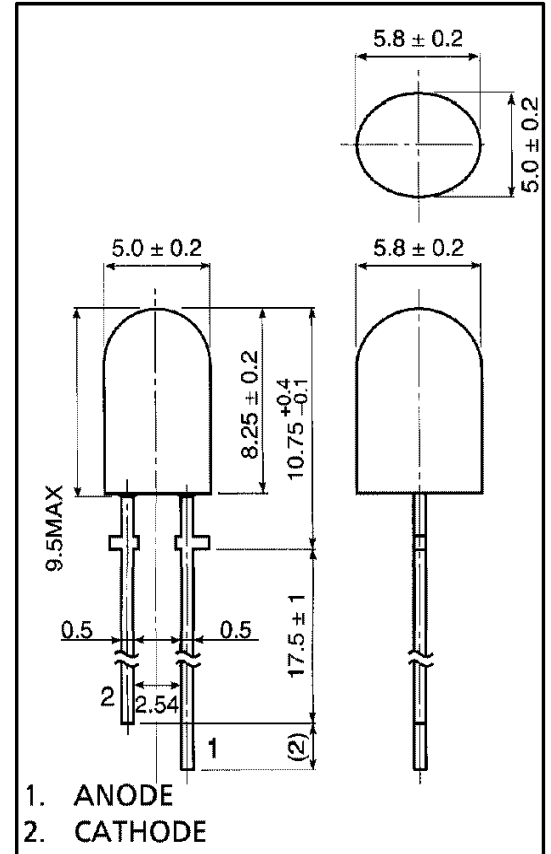


### Features

Elliptical Package  
 Colored Transparent Lens  
 InGaAIP Technology  
 All Plastic Mold Type  
 High Intensity Light Emission  
 Excellent Low Current Light Output

### Applications

Backlight  
 Full Color Signs  
 Outdoor Message Signs



### Series Line-Up

Part Number	Color	Material
TLGE27C	Ultra Bright Yellow Green	InGaAIP
TLOE27C	Ultra Bright Orange	InGaAIP
TLRE27C	Ultra Bright Red	InGaAIP
TLRME27C	Ultra Red	InGaAIP
TLSE27C	Ultra Bright High Efficiency Red	InGaAIP
TLYE27C	Ultra Bright Yellow	InGaAIP

### 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>
TLGE27C	50	4	120.00	-40 ~100	-40 ~ 120
TLOE27C	50	4	120.00	-40 ~100	-40 ~ 120
TLRE27C	50	4	120.00	-40 ~100	-40 ~ 120
TLRME27C	50	4	120.00	-40 ~100	-40 ~ 120
TLSE27C	50	4	120.00	-40 ~100	-40 ~ 120
TLYE27C	50	4	120.00	-40 ~100	-40 ~ 120
Unit	mA	V	mW	°C	°C

**Company Headquarters**  
 3 Norway Lane North  
 Latham, New York 12110  
 Toll Free: 800.984.5337  
 Fax: 518.785.4725



Web: [www.marktechopto.com](http://www.marktechopto.com) | Email: [info@marktechopto.com](mailto:info@marktechopto.com)

**West Coast Sales Office**  
 950 South Coast Drive, Suite 265  
 Costa Mesa, California 92626  
 Toll Free: 800.984.5337  
 Fax: 714.850.9314

### 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@
TLGE27C	574	InGaAIP	30° x 50°	85.00	250.00	-	20mA	-	2.00	2.40	20mA	50	4V
TLOE27C	612	InGaAIP	30° x 50°	272.00	800.00	-	20mA	-	2.00	2.40	20mA	50	4V
TLRE27C	644	InGaAIP	30° x 50°	85.00	300.00	-	20mA	-	1.90	2.40	20mA	50	4V
TLRME27C	636	InGaAIP	30° x 50°	153.00	400.00	-	20mA	-	1.90	2.40	20mA	50	4V
TLSE27C	623	InGaAIP	30° x 50°	272.00	750.00	-	20mA	-	1.90	2.40	20mA	50	4V
TLYE27C	590	InGaAIP	30° x 50°	272.00	650.00	-	20mA	-	2.00	2.40	20mA	50	4V
-	nm	-	deg	mcd				-	V		-	$\mu A$	-

### 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.

### NOTICE:

- TOSHIBA is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or damage to property.
- 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..
- The TOSHIBA products listed in this document are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.). These TOSHIBA products are neither intended nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury ("Unintended Usage"). Unintended Usage include atomic energy control instruments, airplane or spaceship instruments, transportation instruments, traffic signal instruments, combustion control instruments, medical instruments, all types of safety devices, etc.. Unintended Usage of TOSHIBA products listed in this document shall be made at the customer's own risk.
- 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.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
- The information contained herein is subject to change without notice.

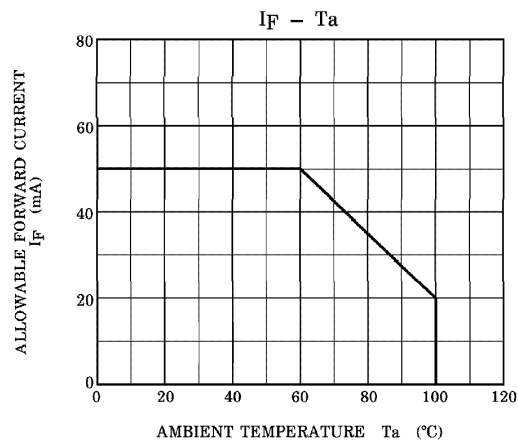
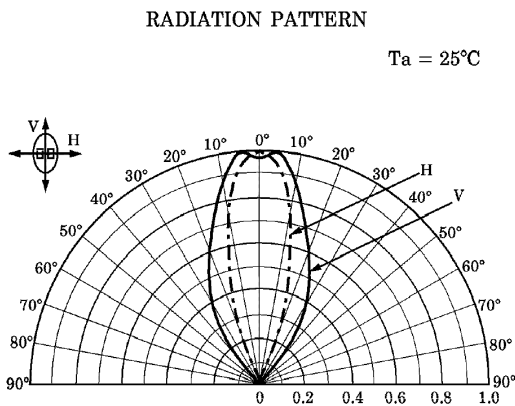
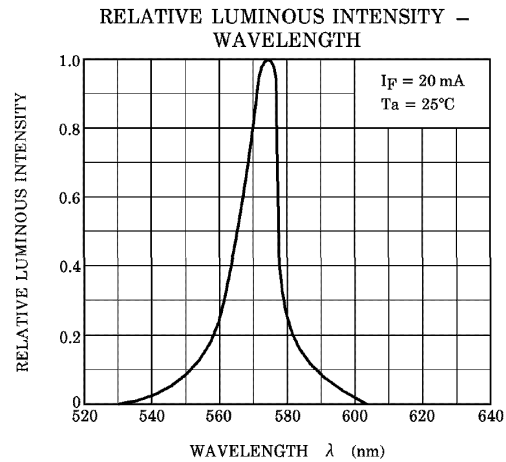
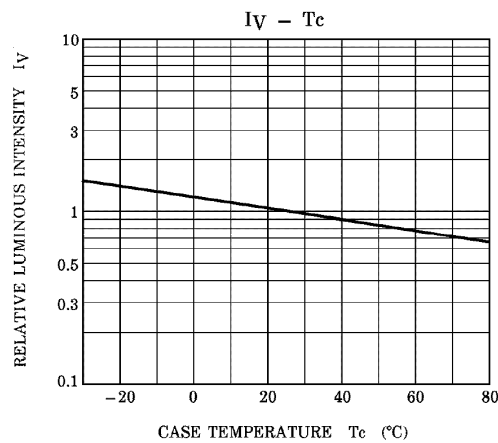
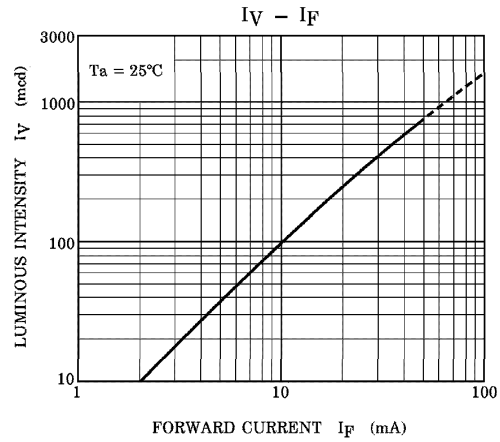
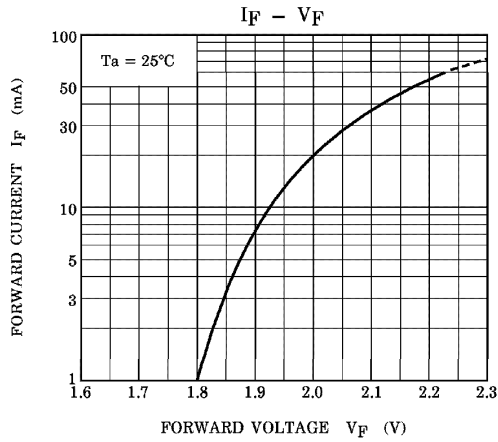
**Company Headquarters**  
 3 Norway Lane North  
 Latham, New York 12110  
 Toll Free: 800.984.5337  
 Fax: 518.785.4725



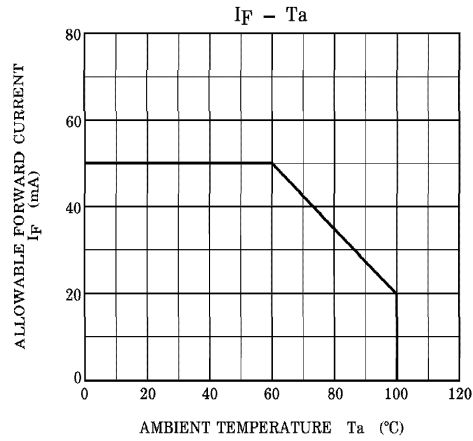
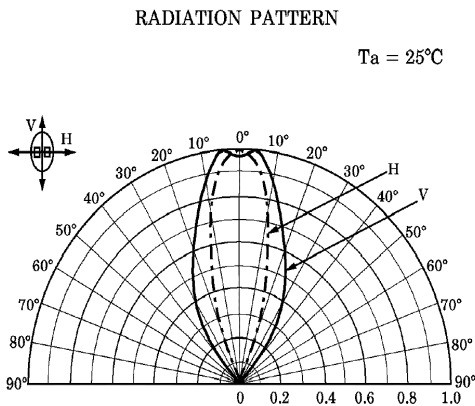
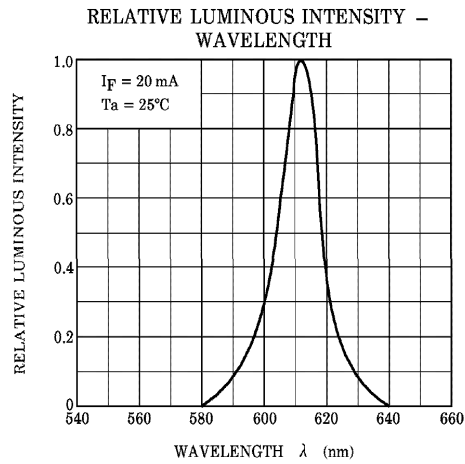
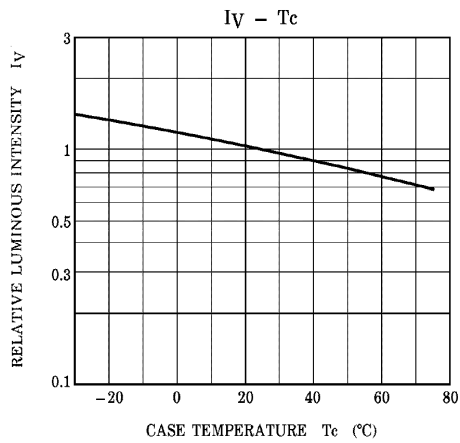
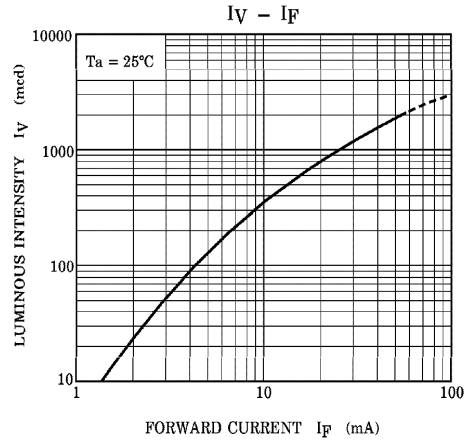
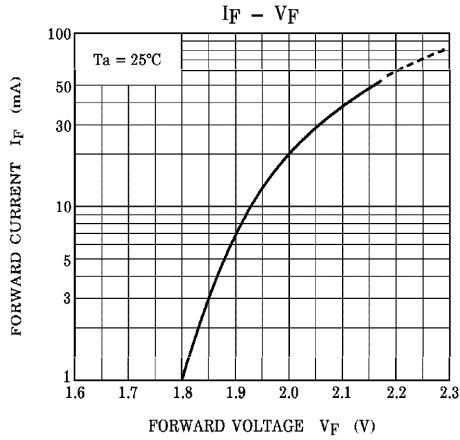
Web: [www.marktechopto.com](http://www.marktechopto.com) | Email: [info@marktechopto.com](mailto:info@marktechopto.com)

**West Coast Sales Office**  
 950 South Coast Drive, Suite 265  
 Costa Mesa, California 92626  
 Toll Free: 800.984.5337  
 Fax: 714.850.9314

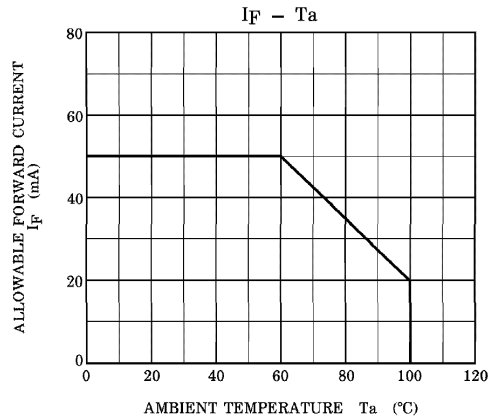
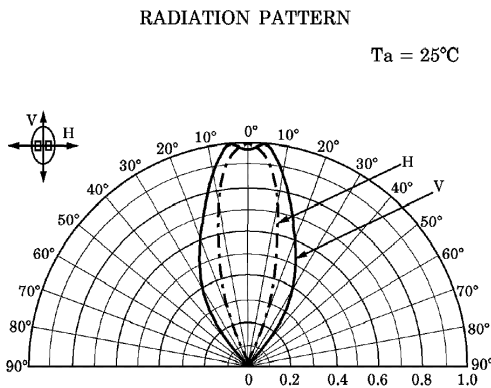
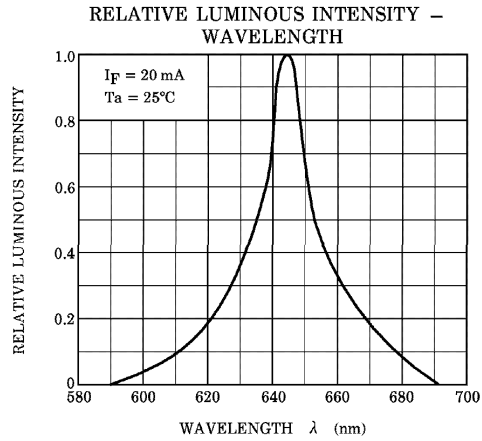
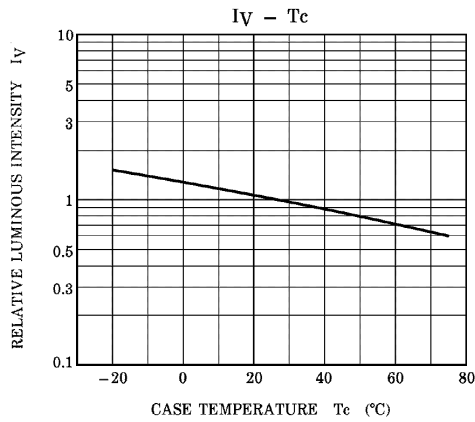
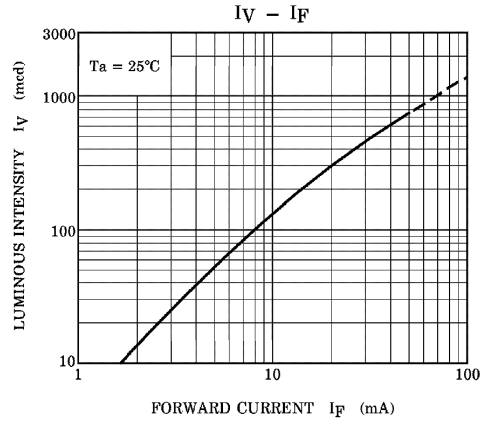
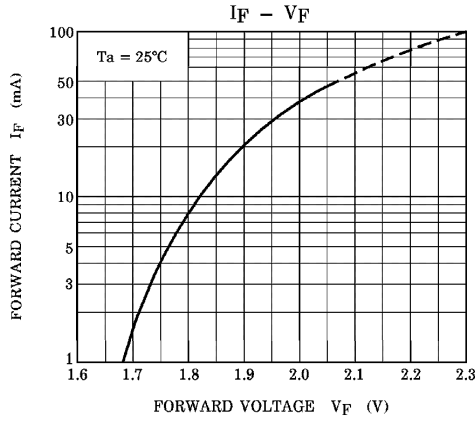
### TLGE27C Graphs



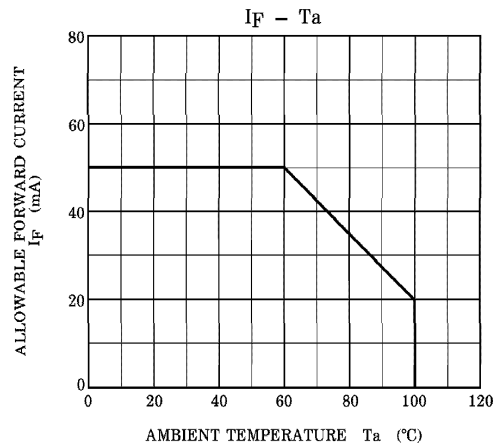
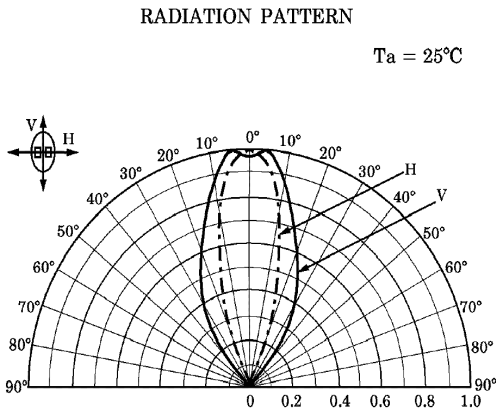
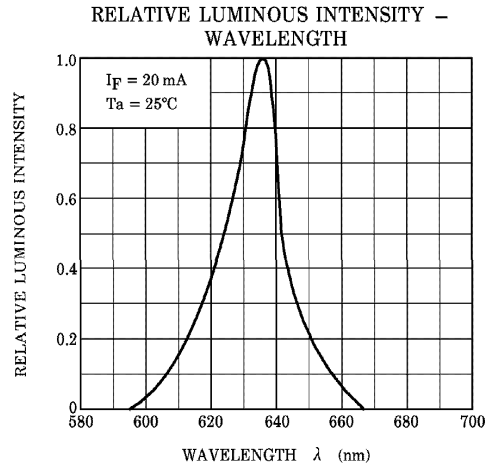
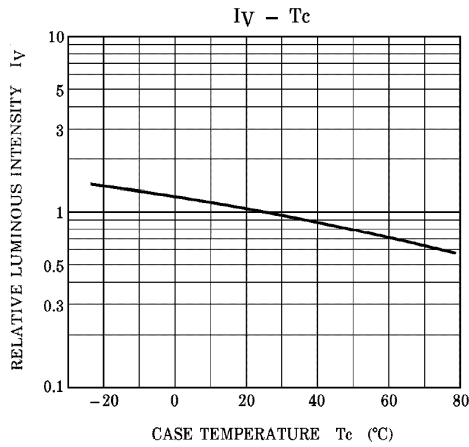
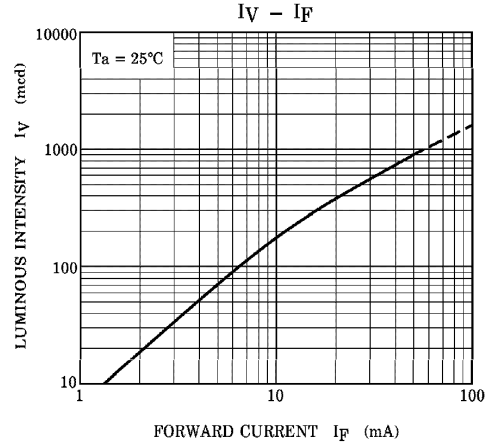
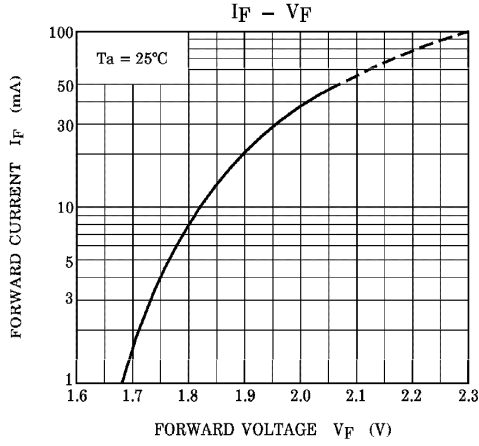
### TLOE27C Graphs



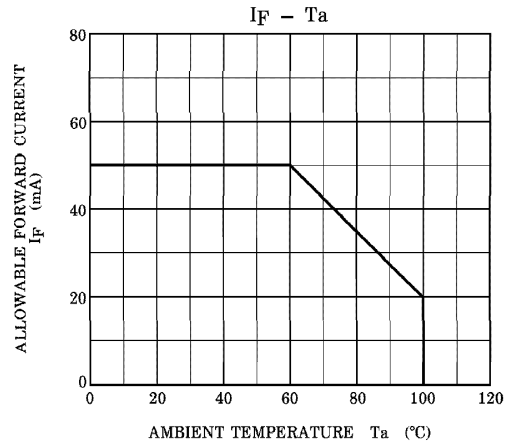
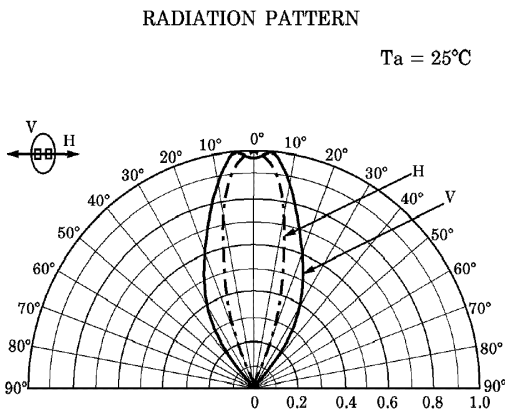
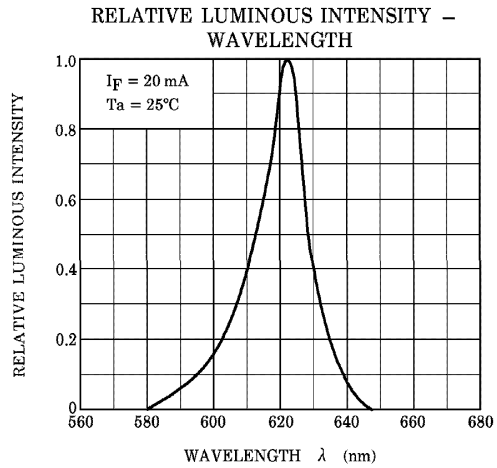
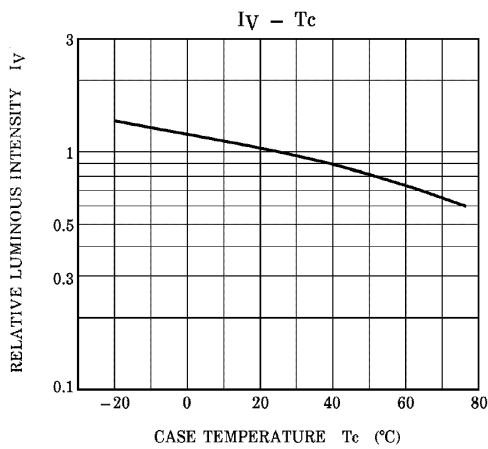
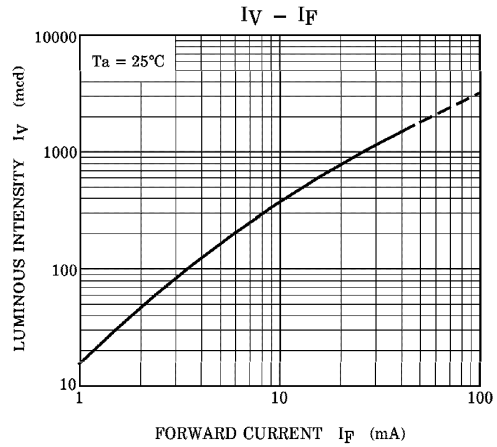
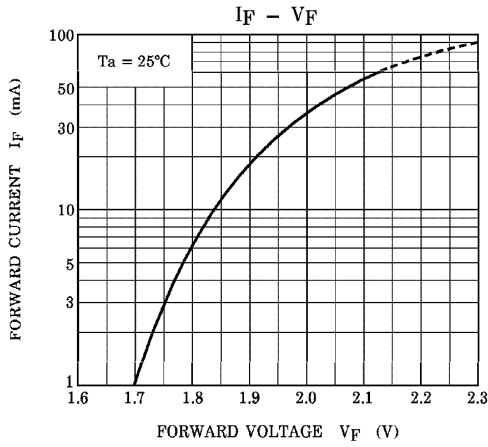
### TLRE27C Graphs



### TLRME27C Graphs



### TLSE27C Graphs



### TLYE27C Graphs

