Unit in mm

TOSHIBA InGaA&P LED

TLGE18T, TLPGE18T

PANEL CIRCUIT INDICATOR

- 5 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 use, etc.

LINE-UP

PRODUCT NAME	COLOR	MATERIAL
TLGE18T	Green	InGaAℓP
TLPGE18T	Pure Green	InGaAtP

<u>(S</u> **CATHODE INDEX** 1. ANODE 2. CATHODE **JEDEC**

Weight: 0.31 g

EIAJ

TOSHIBA

MAXIMUM RATINGS (Ta = 25°C)

PRODUCT NAME	FORWARD CURRENT I _F (mA)	$\begin{array}{c} \text{REVERSE} \\ \text{VOLTAGE} \\ \text{V}_{R} \ (\text{V}) \end{array}$	POWER DISSIPATION PD (mW)	$\begin{array}{c} \text{OPERATING} \\ \text{TEMPERATURE} \\ \text{T}_{\text{opr}} \text{ (°C)} \end{array}$	$\begin{array}{c} {\rm STORAGE} \\ {\rm TEMPERATURE} \\ {\rm T_{stg}} \ (^{\circ}{\rm C}) \end{array}$
TLGE18T	50	4	120	-40~100	-40~120
TLPGE18T	50	4	120	-40~100	-40~120

● 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.

TOSHIBA is continually working to improve the quality and the 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 observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product 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 products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.

FLECTRICAL	VIID	ODTICAL	CHARACTERISTICS	/Ta 25°C\
ELECTRICAL	AIND	OPTICAL	CHARACTERISTICS	(1a = 25 C)

PRODUCT NAME	TYP. EMISSION WAVELENGTH			LUMINOUS INTENSITY I _V		FORWARD VOLTAGE V _F		REVERSE CURRENT I _R				
	$\lambda_{\mathbf{d}}$	$\lambda_{\mathbf{p}}$	Δλ	$I_{\mathbf{F}}$	MIN	TYP.	$I_{\mathbf{F}}$	TYP.	MAX	$I_{\mathbf{F}}$	MAX	$v_{\mathbf{R}}$
TLGE18T	571	(574)	17	20	272	700	20	2.0	2.4	20	50	4
TLPGE18T	558	(562)	14	20	85	200	20	2.1	2.4	20	50	4
Unit		nm		mA	m	cd	mA	7	I	mA	μ A	V

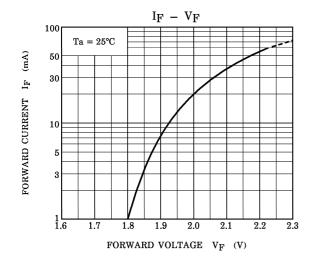
PRECAUTIONS

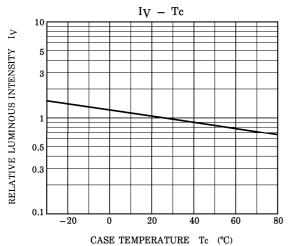
Please be careful of the following:

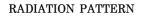
- Soldering temperature: 260°C max, soldering time: 3 s max (soldering portion of lead: below the lead stopper)
- If the lead is formed, the lead should be formed up to 5 mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.
- This visible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

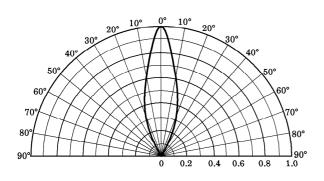
TLGE18T

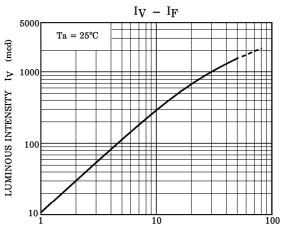




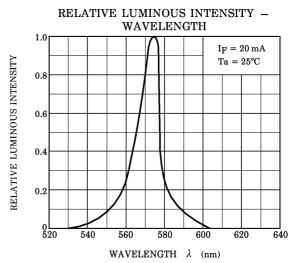


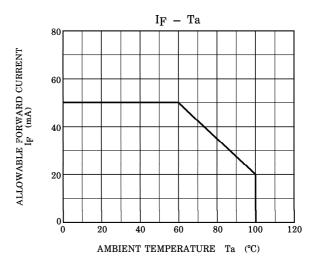
 $Ta = 25^{\circ}C$



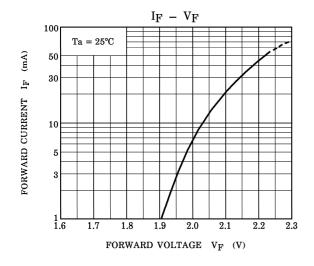


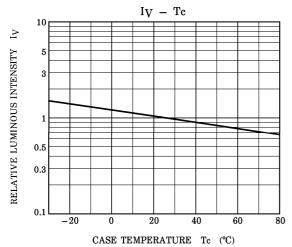
FORWARD CURRENT I_F (mA)





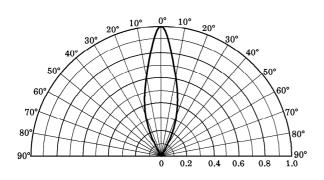
TLPGE18T

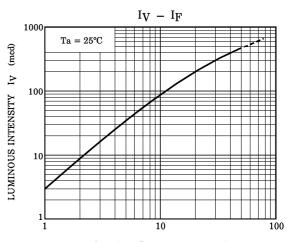






 $Ta = 25^{\circ}C$





FORWARD CURRENT IF (mA)

