# **TOSHIBA**

## Toshiba TLxU1100 SMT LEDs

#### **Features**

3.2 (L) x 2.8 (W) x 1.9 (H) mm Size
Flat-top Type
InGaAIP LED
Low Drive Current, High Intensity Emission
High Operating Temperature
Reflow Soldering is possible
Standard embossed taping 8 mm Pitch: T09 (1000 pcs/reel)

#### **Applications**

Automotive Use Message Signboard Backlight

Series Line-Up

Part Number	Color	Material		
TLGU1100	Ultra Bright Yellow Green	InGaAIP		
TLOU1100	Ultra Bright Orange	InGaAIP		
TLPGU1100	Ultra Pure Green	InGaAIP		
TLSU1100	Ultra High Efficiency Red	InGaAIP		
TLYU1100	Ultra Bright Yellow	InGaAIP		

UNIT: mm

POLARITY 1 2 LED CHIP POSITION

3.2

CATHODE INDEX

(1.4)

(1.4)

(1.4)

Tolerance: ±0.2 mm

Recommended soldering pattern

Part Number	Forward Current IF	Reverse Voltage V <sub>R</sub>	Power Dissipation PD	Operating Temperature Topr	Storage Temperature T <sub>stg</sub>
TLGU1100	30	4	84.00	<b>−40 ~ 100</b>	<b>−40 ~ 100</b>
TLOU1100	30	4	72.00	<b>−40 ~ 100</b>	<b>−40 ~ 100</b>
TLPGU1100	30	4	84.00	<b>−40 ~ 100</b>	<b>−40 ~ 100</b>
TLSU1100	30	4	72.00	<b>−40 ~ 100</b>	<b>−40 ~ 100</b>
TLYU1100	30	4	75.00	<b>−40 ~ 100</b>	-40 ~ 100
Unit	mA	V	mW	°C	°C

Company Headquarters 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725



Fax: 714.850.9314

Web: www.marktechopto.com | Email: info@marktechopto.com



#### Toshiba TLxU1100 SMT LEDs

Electrical and Optical Characteristics (Ta=25°C)

Part Number	<b>PWL nm</b> λP	Material	View Angle	Luminous Intensity			Forward Voltage V <sub>F</sub>				Rev Current		
			<b>2</b> θ1/2	min.	typ.	max.	IF@	min.	typ.	max.	IF@	max.	VR@
TLGU1100	574	InGaAIP	120°	15.30	45.00	-	20mA	_	2.30	2.80	20mA	50	4V
TLOU1100	612	InGaAlP	120°	47.60	100.00	_	20mA	_	2.00	2.40	20mA	50	4V
TLPGU1100	562	InGaAlP	120°	4.76	12.00	-	20mA	_	2.30	2.80	20mA	50	4V
TLSU1100	636	InGaAlP	120°	27.20	80.00	_	20mA	_	2.00	2.40	20mA	50	4V
TLYU1100	590	InGaAlP	120°	15.30	50.00	-	20mA	_	2.10	2.50	20mA	50	4V
-	nm	-	deg		mcd		-		V		-	μ <b>A</b>	-

#### NOTICE:

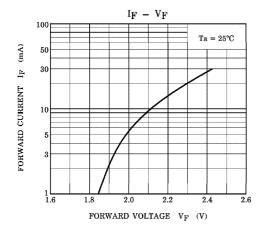
- TOSHIBA is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA 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.

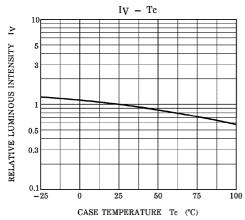


West Coast Sales Office 950 South Coast Drive, Suite 265 Costa Mesa, California 92626 Toll Free: 800.984.5337

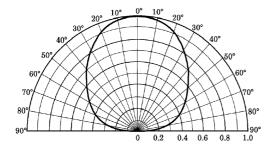
Fax: 714.850.9314

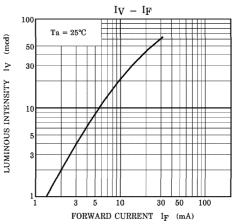
#### **TLGU1100 Graphs**

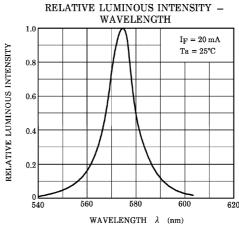


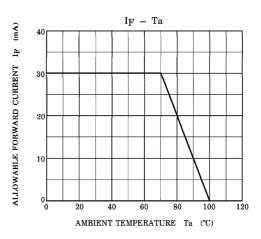










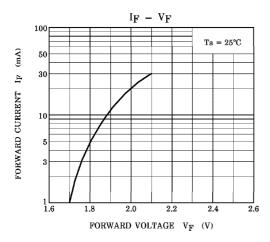


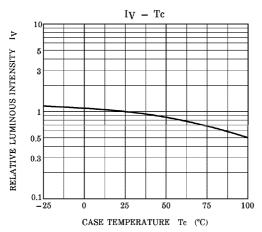
Company Headquarters 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725

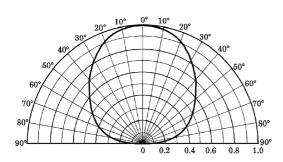


Web: www.marktechopto.com | Email: info@marktechopto.com

## **TLOU1100 Graphs**

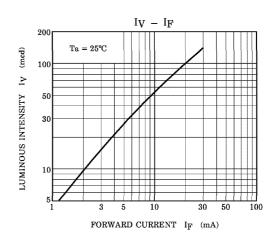


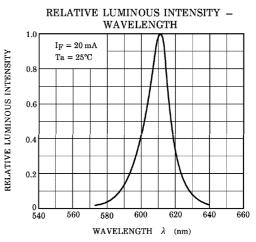


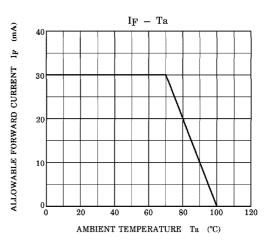


RADIATION PATTERN

 $Ta = 25^{\circ}C$ 





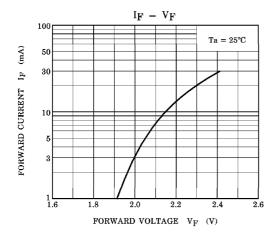


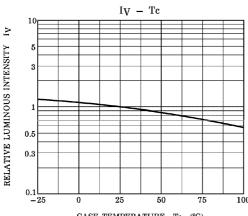
Company Headquarters 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725

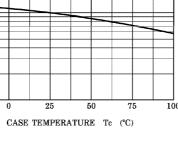


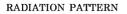
Web: www.marktechopto.com | Email: info@marktechopto.com

## **TLPGU1100 Graphs**

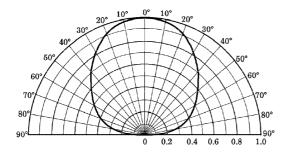


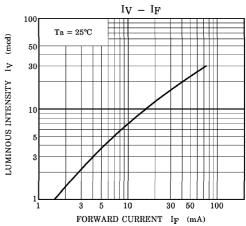




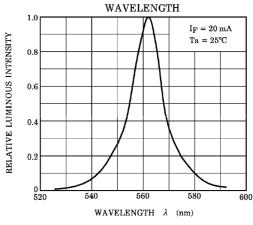


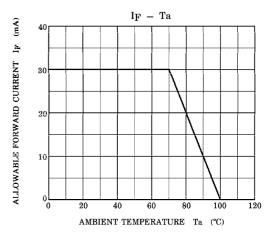






RELATIVE LUMINOUS INTENSITY -

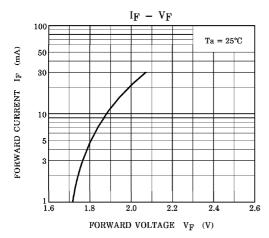


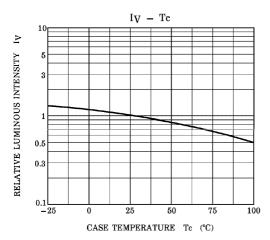


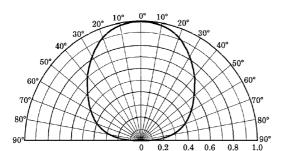
**Company Headquarters** 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725



## **TLSU1100 Graphs**

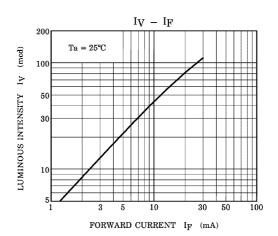


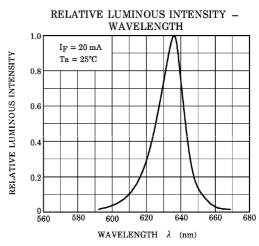


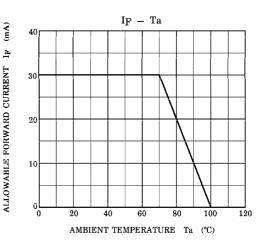


RADIATION PATTERN

 $Ta = 25^{\circ}C$ 





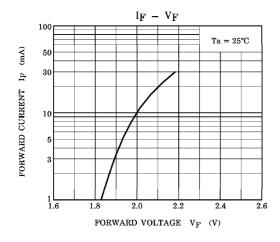


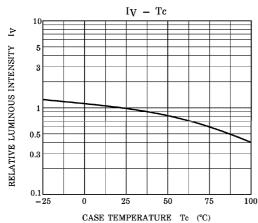
Company Headquarters 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725

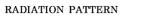


West Coast Sales Office 950 South Coast Drive, Suite 265 Costa Mesa, California 92626 Toll Free: 800.984.5337 Fax: 714.850.9314

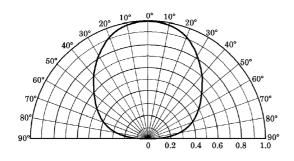
#### **TLYU1100 Graphs**

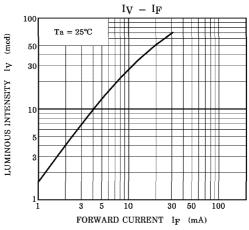


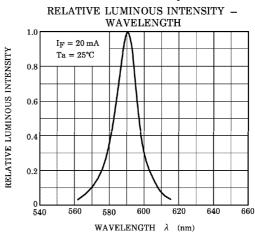


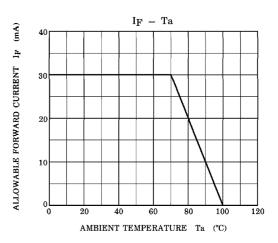


 $Ta = 25^{\circ}C$ 









**Company Headquarters** 3 Norhway Lane North Latham, New York 12204 Toll Free: 800.984.5337 Fax: 518.785.4725



Toll Free: 800.984.5337 Fax: 714.850.9314

**West Coast Sales Office**