TOSHIBA LED LAMP

TLG336S, TLG337S, TLS336S **TLS337S, TLR336S, TLR337S**

- 8.0mm (0.3") Character Height Numerical Display.
- Application: Numerical Readout for Instrument and Consumer Product.
- Luminous Intensity Ranking Performed Uniform Display.
- Available Both Type of Package Colors.

TL xxxS: Gray Color Coated Only on Surface. TL xxxT: Black Color Coated Only on Surface.

PRODUCT LINE UP

TLG336S/TLG337S	GaP GREEN
TLS336S/TLS337S	GaAsP RED
TLR336S/TLR337S	GaP RED

TYPE No. vs FULLY DISPLAY FONT

COMMON CATHODE	COMMON ANODE	FULLY DISPLAY FONT
TLG336S TLS336S TLR336S	TLG337S TLS337S TLR337S	

MAXIMUM RATINGS ($Ta = 25^{\circ}C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
DC Forward Current/seg.	$I_{\mathbf{F}}(\mathrm{DC})/\mathrm{seg}$	20	mA	
Pulse Forward Current/seg.(Note)	I _{FP} /seg	110	mA	
Reverse Voltage/seg.	$v_{ m R}$	6	V	
Operating Temperature Range	${ m T_{opr}}$	-40~85	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~85	°C	

Note: Pulse Width=1ms, Duty Ratio=1/10

- 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.
 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 TOSHIBA CORPORATION or others.

 The information contained herein is subject to change without notice.

ELECTRICAL-OPTICAL CHARACTERISTICS (Ta = 25°C)

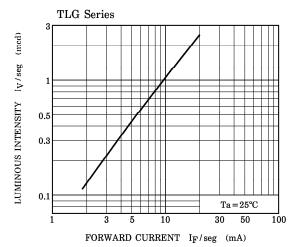
TYPE No.		MITTI E LEI	NG NGTH	LUMINOUS INTENSITY I _V /seg		FORWARD VOLTAGE V _F /seg			REVERSE CURRENT I_R/seg		LUMINOUS INTENSITY MATCHING RATIO IV-M			
	$\lambda_{\mathbf{p}}$	Δλ	I _F /seg	Min.	Тур.	I _F /seg	Min.	Тур.	Max.	I _F /seg	Max.	V _R /seg	Max.	I _F /seg
TLG Series	565	30		0.47	1.06	10	1.7	2.0	2.5					10
TLS Series	635	40	10	1.06	2.40	10	1.7	1.9	2.5	10	5	6	2.3	10
TLR Series	700	100		0.21	0.48	5	1.4	2.0	2.5					5
UNIT	n	m	mA	m	cd	mA		V		mA	μ A	V	_	mA

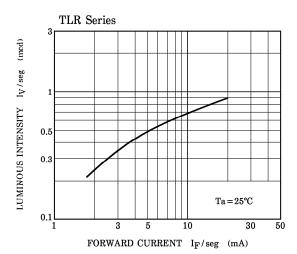
PRECAUTION

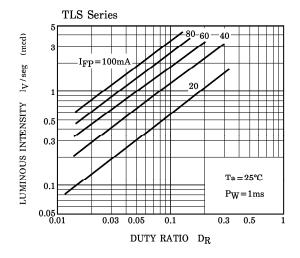
Please be careful of the following.

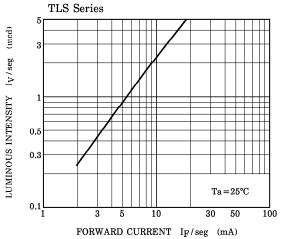
• Soldering temperature should be less than 260°C for 3 seconds at 2.0mm from the seating plane.

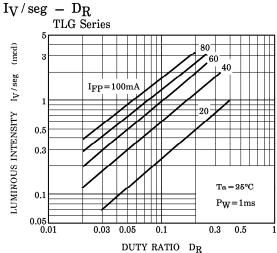


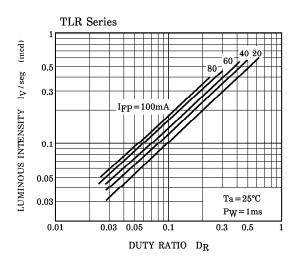


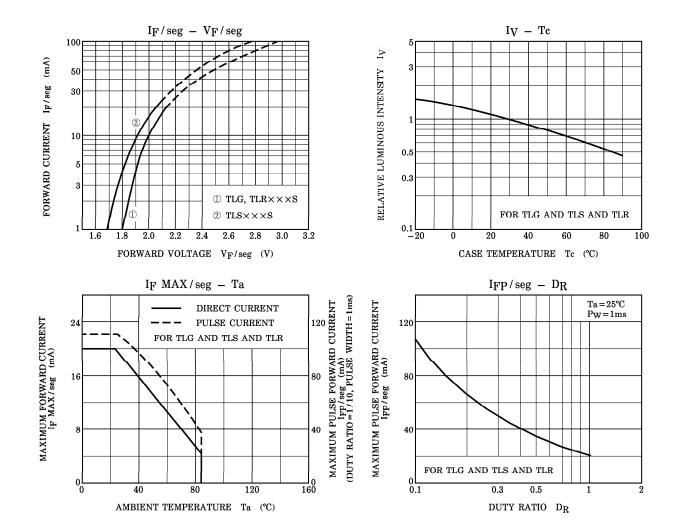




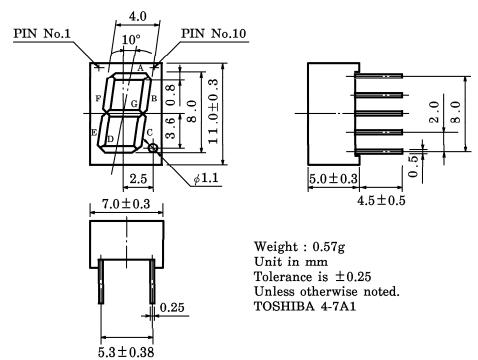








OUTLINE DIMENSIONS



PIN CONNECTION

	336S Series	337S Series				
A A	9 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 6 0 0 A B C D E F G Dp 1 10 8 5 4 2 3 7				
PIN No.	CONNECTION	PIN No.	CONNECTION			
1	Anode A	1	Cathode A			
2	Anode F	2	Cathode F			
3	Anode G	3	Cathode G			
4	Anode E	4	Cathode E			
5	Anode D	5	Cathode D			
6	Cathode Dp (Right Hand)	6	Cathode Dp (Right Hand)			
7	Anode Dp (Right Hand)	7	Anode Dp (Right Hand)			
8	Anode C	8	Cathode C			
9	Common Cathode	9	Common Anode			
10	Anode B	10	Cathode B			