

TOSHIBA LED DISPLAY

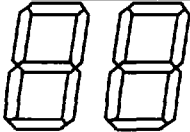
TLG322, TLG323, TLR322, TLR323

- 7.6mm Character Height 2 Dight Display for Multiplex Drive Use.
- Applications : Numerical Readout for Instrument and Consumer Product.
- Luminous Intensity Ranking Performed Uniform Display.

PRODUCT LINE UP

TLG322 / TLG323	GaP GREEN
TLR322 / TLR323	GaP RED

TYPE No. vs FULLY DISPLAY FONT

COMMON CATHODE	COMMON ANODE	FULLY DISPLAY FONT
TLG322 TLR322	TLG323 TLR323	

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING		UNIT
		TLGxxxA	TLRxxx	
DC Forward Current / seg.	I_F (DC) / seg	13	13	mA
Pulse Forward Current / seg. (Note)	I_{FP} / seg	50	50	mA
Reverse Voltage / seg.	V_R	6	3	V
Operating Temperature Range	T_{opr}	-30~75	-30~75	°C
Storage Temperature Range	T_{stg}	-30~80	-30~80	°C

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

ELECTRICAL-OPTICAL CHARACTERISTICS (Ta = 25°C)

TYPE No.	EMITTING WAVE LENGTH			LUMINOUS INTENSITY I_V / seg			FORWARD VOLTAGE V_F / seg				REVERSE CURRENT I_R / seg		LUMINOUS INTENSITY MATCHING RATIO I_V -M	
	λ_p	$\Delta\lambda$	I_F / seg	Min.	Typ.	I_F / seg	Min.	Typ.	Max.	I_F / seg	Max.	V_R / seg	Max.	I_F / seg
TLG Series	565	30	10	0.13	(0.32)	10	1.8	2.0	2.5	10	5	6	2.5	5
TLR Series	700	100		0.13	0.15	5	1.8	2.1	2.5	15		3	2.5	5
UNIT	nm		mA	mcd		mA	V			mA	μ A	V	—	mA

PRECAUTION

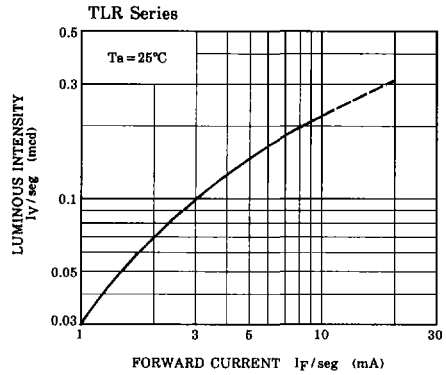
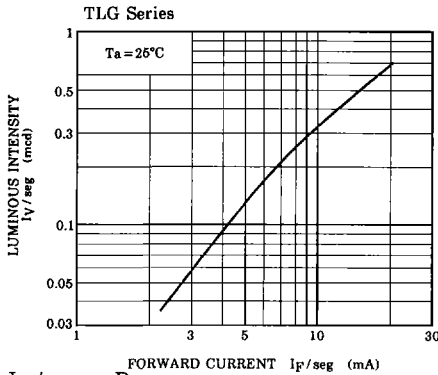
Please be careful of the following.

- Soldering temperature should be less than 260°C for 7 seconds at 1.5mm from the seating plane.
- With the case-type LED display, cleaning all over may cracks in the case.

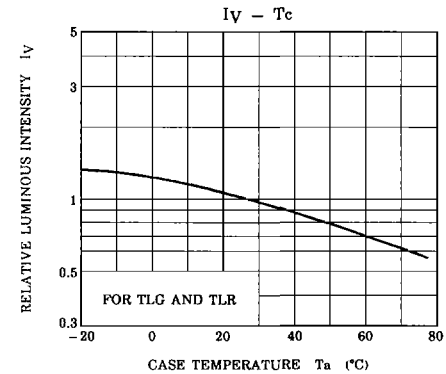
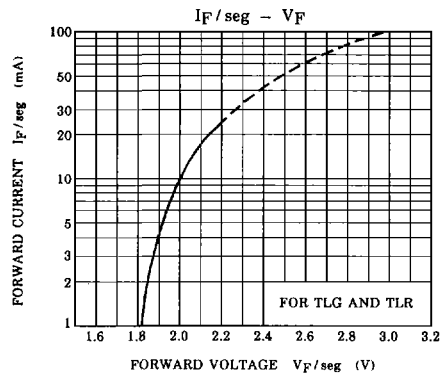
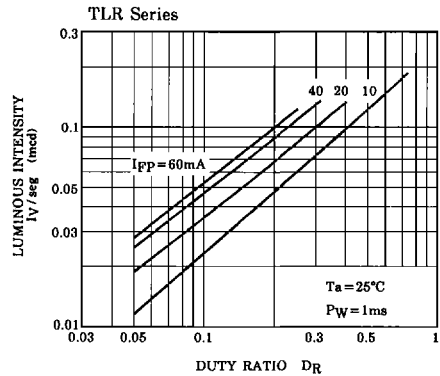
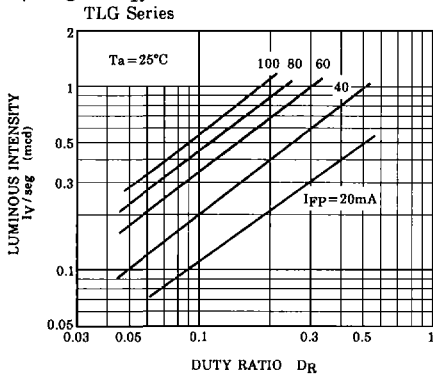
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• TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It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

$I_f / \text{seg} - I_f / \text{seg}$



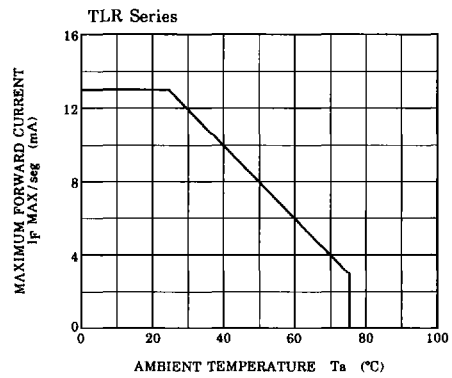
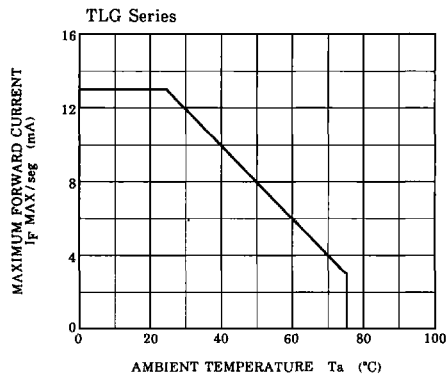
$I_f / \text{seg} - D_R$



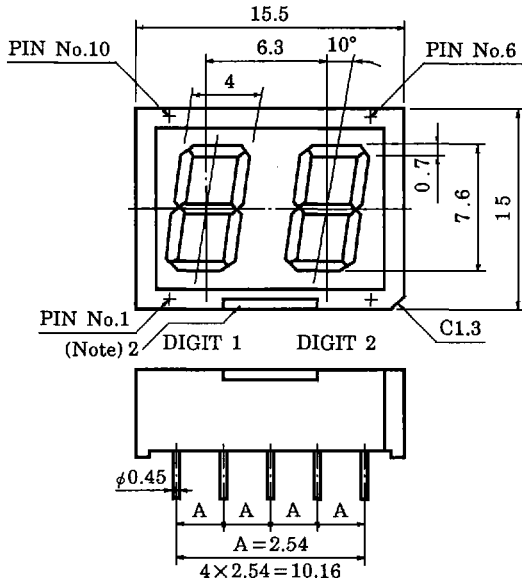
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I_F (DC) MAX / seg - T_a

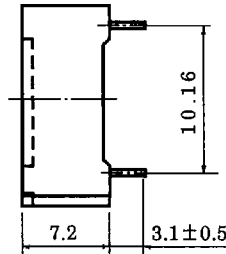


OUTLINE DIMENSIONS

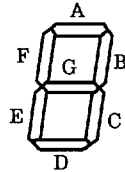


Unit in mm

1. Tolerance is ± 0.25
unless otherwise noted.



SEGMENT NAME



Weight : 2.08g

322 Series : TOSHIBA 4-16A1A

323 Series : TOSHIBA 4-16A1B

Note 2. INDEX

PIN CONNECTION

322 Series		323 Series	
PIN No.	CONNECTION	PIN No.	CONNECTION
1	Anode g	1	Cathode g
2	No Pin	2	No Pin
3	Anode a	3	Cathode a
4	Anode f	4	Cathode f
5	Digit 2 Common Cathode	5	Digit 2 Common Anode
6	Anode d	6	Cathode d
7	Anode e	7	Cathode e
8	Anode c	8	Cathode c
9	Anode b	9	Cathode b
10	Digit 1 Common Cathode	10	Digit 1 Common Anode