

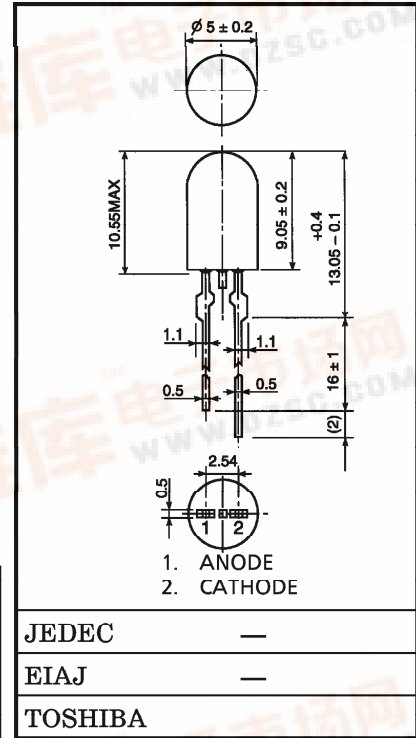
TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

**TLGD175**

2 CHIP LED LAMP FOR MESSAGE BOARD

Unit in mm

- 2 Chip Series Connection
- All Plastic Mold Type : Clear Transparent Lens
- Low Drive Current, High Intensity Green Light Emission  
Recommended Forward Current :  $I_F = 15 \sim 20\text{mA}$  (DC)
- All Plastic Molded Lens, Provides an Excellent ON-OFF Contrast Ratio.
- Fast Response Time, Capable of Pulse Operation.
- Wide Radiation : Suitable for Message Board  
( $\pm 30\text{deg}$  : //,  $\pm 15\text{deg}$  :  $\perp$ )



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC)	$I_F$	30	mA
Reverse Voltage	$V_R$	8	V
Power Dissipation	$P_D$	120	mW
Operating Temperature Range	$T_{opr}$	$-30 \sim 85$	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	$-40 \sim 100$	$^\circ\text{C}$

JEDEC	—
EIAJ	—
TOSHIBA	

Weight : 0.35g

ELECTRO-OPTICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	—	4.3	5.4	V
Reverse Current	$I_R$	$V_R = 8\text{V}$	—	—	5	$\mu\text{A}$
Luminous Intensity	TLGD175	$I_F = 20\text{mA}$ (Note)	153	400	—	mcd
	TLGD175 (PQ)		153	—	736	
Peak Emission Wave Length	$\lambda_p$	$I_F = 20\text{mA}$	—	567	—	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20\text{mA}$	—	25	—	nm

(Note) Rank selection carried out under next standard range respectively, although it needs  $\pm 15\%$  sdditionary for guaranteed limits.

P : 180-360mcd    Q : 320-640mcd

Each rank products is classified by package unit, and (PQ) includes P and Q.

961001FAA2

● 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.

● 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.



**PRECAUTION**

Please be careful of the followings.

- Soldering temperature : 260°C MAX.    Soldering time : 3s MAX.  
(Soldering portion of lead : below the lead stopper)
- If the lead is formed, the lead should be formed below the lead stopper without forming stress to the resin. Soldering should be performed after lead forming.

