

TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

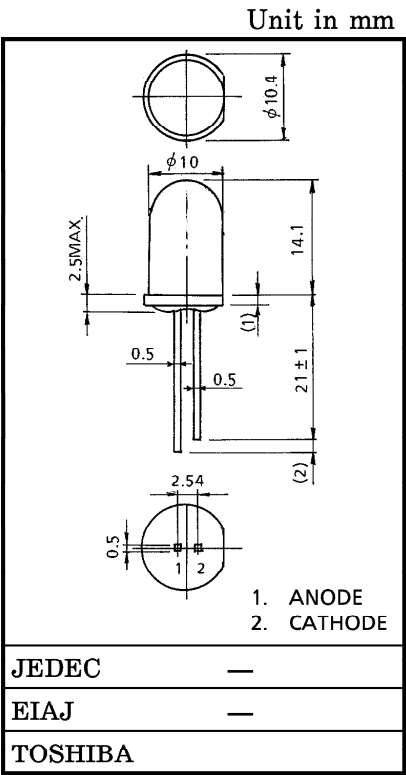
TLGC190P, TLGC191P

PANEL CIRCUIT INDICATOR

- Excellent Bright Green
TLGC190P : Colorless Clear Lens
TLGC191P : Milky Diffused Lens
- Low Drive Current, Practical Brightness are Achieved
Roughly : 0.5mA for Indoor Application
20mA for Outdoor Application
- Plastic Molded Colorless Clear Lens, Provides for High Contrast of ON-OFF Ratio.
- Without stand-offs

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current	IF	40	mA
Reverse Voltage	VR	4	V
Power Dissipation	PD	125	mW
Operating Temperature Range	Topr	−20~85	°C
Storage Temperature Range	Tstg	−30~100	°C



Weight : 1.0g

961001FAA1

- 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.

ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		V_F	$I_F = 20\text{mA}$	—	2.15	2.8	V
Reverse Current		I_R	$V_R = 4\text{V}$	—	—	100	μA
Luminous Intensity	TLGC190P	I_V	$I_F = 20\text{mA}$ (Note)	272	700	—	mcd
	TLGC190P (QR)			272	—	1290	
	TLGC190P (RS)			476	—	2300	
	TLGC191P			47.6	180	—	
	TLGC191P (MN)			47.6	—	230	
	TLGC191P (NP)			85.0	—	414	
Peak Emission Wave Length		λ_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.

M : 56~112mcd, N : 100~200mcd, P : 180~360mcd,

Q : 320~640mcd, R : 560~1120mcd, S : 1000~2000mcd

Each rank products is classified by package unit, (MN) includes M and N, (NP) includes N and P, (QR) includes Q and R and (RS) includes R aud S.

PRECAUTION

Please be careful of the followings.

- Soldering temperature : 260°C MAX. Soldering time : 3s MAX.
(Soldering portion of lead : up to 2mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.

