Unit in mm

TOSHIBA LED LAMP GaP GREEN LIGHT EMITTION

TLGC190P, TLGC191P

PANEL CIRCUIT INDICATOR

Excellent Bright Green

TLGC190P: Colorless Clear Lens TLGC191P: Milky Diffused Lens

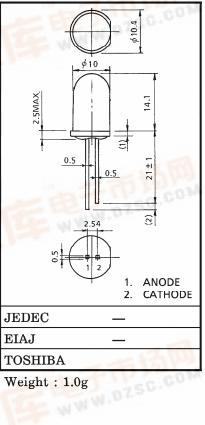
Low Drive Current, Practical Brightness are Achieved

Roughtly: 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	$ m I_{F}$	40	mA
Reverse Voltage	$v_{ m R}$	4	V
Power Dissipation	$P_{\mathbf{D}}$	125	mW
Operating Temperature Range	$T_{ m opr}$	-20~85	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-30~100	°C



Weight: 1.0g

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.

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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage		$ m V_{ m F}$	I _F =20mA	_	2.15	2.8	V
Reverse Current		$_{ m I_R}$	$V_R=4V$	_	_	100	μ A
Luminous Intensity	TLGC190P	I _V	I _F =20mA (Note)	272	700	_	mcd
	TLGC190P (QR)			272	_	1290	
	TLGC190P (RS)			476	<u> </u>	2300	
	TLGC191P			47.6	180	_	
	TLGC191P (MN)			47.6	_	230	
	TLGC191P (NP)			85.0	_	414	
Peak Emission Wave Length		$\lambda_{\mathbf{p}}$	I _F =20mA	_	567	_	nm
Spectral Line Half Width		Δλ	I _F =20mA	_	25	_	nm

(Note) Rank selection carried out under next standard range respectively, although it needs ±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 and 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.

