TOSHIBA

TOSHIBA LED LAMP GaP GREEN LIGHT EMISSION

TLGD190P

PANEL CIRCUIT INDICATOR

Striking Bright Green

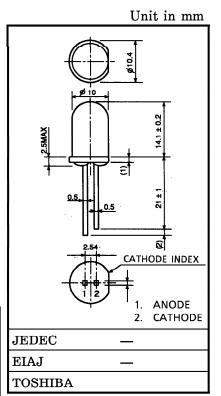
Low Drive Current, Practical Brightness are Achieved

Roughly: 0.5mA for Indoor Application 20mA for Outdoor Application

- Plastic Molded Colorless Clear Lens Provides for High Contrast of ON-OFF Ratio.
- Lighting Linearity Provides for an Application from DC to Pulse Operation.
- Without stand-offs.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Forward Current (DC)	$I_{\mathbf{F}}$	40	mA
Reverse Voltage	$V_{\mathbf{R}}$	4	V
Power Dissipation	$P_{\mathbf{D}}$	125	mW
Operating Temperature Range	$T_{ m opr}$	pr -20~85	
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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The information contained herein is subject to change without notice.

ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

CHAF	RACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward V	oltage	$ m V_{f F}$	$I_{\mathbf{F}} = 20 \text{mA}$	_	2.15	2.8	V
Reverse Cu	ırrent	$I_{ m R}$	$V_R=4V$	_	_	100	μ A
Luminous	TLGD190P	- I _V	I _F =20mA (Note)	850	1500	_	
Intensity	TLGD190P (ST)			850	_	4140	mcd
Peak Emis	sion Wave Length	$\lambda_{ m p}$	I _F =20mA	_	565	_	nm
Spectral Li	ine Half Width	Δλ	$I_F = 20 \text{mA}$		25		nm

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

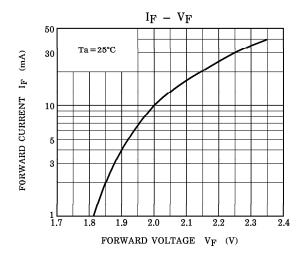
S: 1000-2000mcd T: 1800-3600mcd

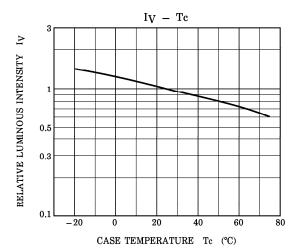
Each rank products is classified by package unit, and (ST) includes S and T.

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.







Ta=25°C

