

TOSHIBA LED LAMP

**TLG211, TLO211, TLR211, TLS211, TLY211**

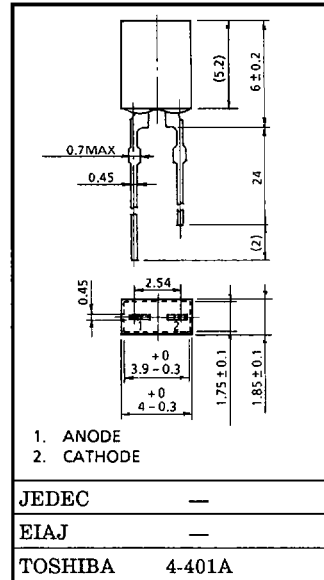
PANEL CIRCUIT INDICATOR

Unit in mm

- All Plastic Mold Type
- Rectangular Type (Surface Size 2×4mm)
- Low Drive Current, High Intensity Light Emission.  
Recommended Forward Current :  $I_F=10\sim 15\text{mA}$  (DC)
- Fast Response Time, Capable of Pulse Operation.

MATERIALS

PRODUCT NAME	MATERIALS	LIGHT EMITTING COLOR
TLG211	GaP	Green
TLY211	GaAsP	Yellow
TLO211	GaAsP	Orange
TLS211	GaAsP	Red
TLR211	GaP	



Weight : 0.12g

MAXIMUM RATINGS (Ta = 25°C)

PRODUCT NAME	FORWARD CURRENT $I_F$ (mA)	REVERSE VOLTAGE $V_R$ (V)	POWER DISSIPATION $P_D$ (mW)	OPERATING TEMPERATURE RANGE $T_{opr}$ (°C)	STORAGE TEMPERATURE RANGE $T_{stg}$ (°C)
TLG211	25	4	70	-20~75	-30~100
TLY211	25	4	70	-20~75	-30~100
TLO211	25	4	70	-20~75	-30~100
TLS211	25	4	70	-20~75	-30~100
TLR211	20	4	56	-20~75	-30~100

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.

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• Gallium arsenide (GaAs) is a substance used in the products described in this document. GaAs dust and fumes are toxic. Do not break, cut or pulverize the product, or use chemicals to dissolve them. When disposing of the products, follow the appropriate regulations. Do not dispose of the products with other industrial waste or with domestic garbage.

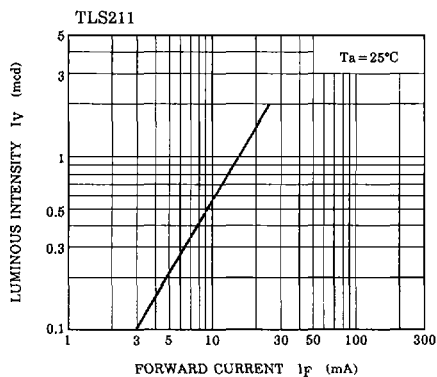
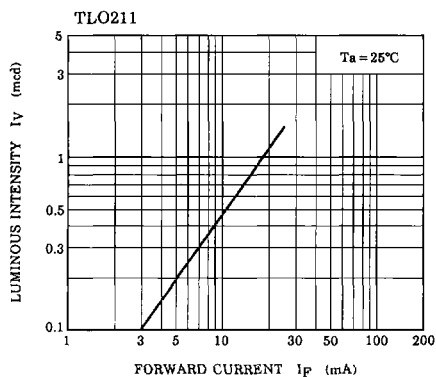
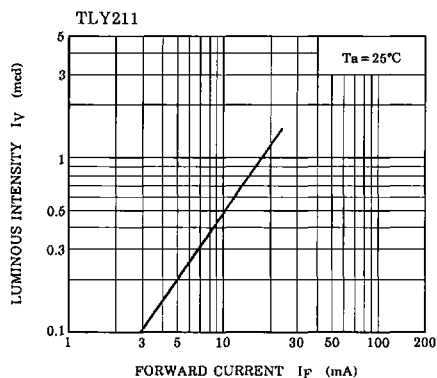
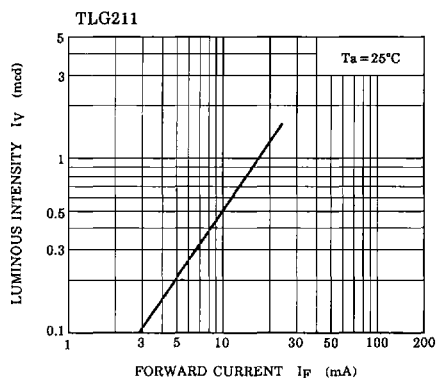
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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

PRODUCT NAME	EMISSION SPECTRUM			LUMINOUS INTENSITY I <sub>V</sub>			FORWARD VOLTAGE V <sub>F</sub>			REVERSE CURRENT I <sub>R</sub>	
	λ <sub>p</sub>	Δλ	I <sub>F</sub>	MIN.	TYP.	I <sub>F</sub>	TYP.	MAX.	I <sub>F</sub>	MAX.	V <sub>R</sub>
TLG211	565	25	10	0.5	1.2	20	2.15	2.8	20	5	4
TLY211	585	32	10	0.5	1.2	20	2.05	2.8	20	100	4
TLO211	610	35	10	0.5	1.2	20	2.05	2.8	20	100	4
TLS211	635	40	10	0.9	1.5	20	2.05	2.8	20	100	4
TLR211	700	100	10	0.5	1.2	20	2.15	2.8	20	5	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

I<sub>V</sub> - I<sub>F</sub>



$I_V - I_F$

