

(TLG163)

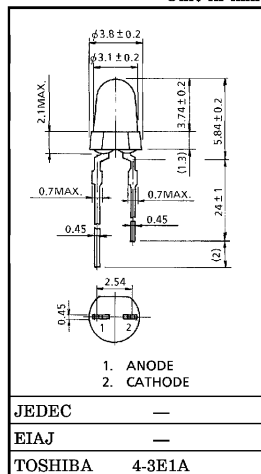
HIGH PANEL CIRCUIT INDICATOR

Unit in mm

- All Plastic Mold Type  
 TL□163 : Colored Transparent Lens  
 TL□164 : Colored Diffused Lens
- Low Drive Current, High Intensity 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.

MATERIALS

PRODUCT NAME	Materials	Light emitting color
TLPG163 / TLPG164	GaP	Pure Green
TLG163 / TLG164	GaP	Green
TLUG163 / TLUG164	GaP	
TLPY164	GaP	Pure Yellow
TLY163 / TLY164	GaAsP	Yellow
TLUY163 / TLUY164	GaAsP	
TLO163 / TLO164	GaAsP	Orange
TLS163 / TLS164	GaAsP	Red
TLUR163 / TLUR164	GaAlAs	



JEDEC	—
EIAJ	—
TOSHIBA	4-3E1A

Weight : 0.12g

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

PRODUCT NAME	Forward Current $I_F$ (mA)	Reverse Voltage $V_R$ (V)	Power Dissipation $P_D$ (mW)	Operating Temperature Range $T_{opr}$ ( $^\circ\text{C}$ )	Storage Temperature Range $T_{stg}$ ( $^\circ\text{C}$ )
TLPG163 / TLPG164	25	4	70	-20~75	-30~100
TLG163 / TLG164	25	4	70	-20~75	-30~100
TLUG163 / TLUG164	25	4	70	-20~75	-30~100
TLPY164	25	4	70	-20~75	-30~100
TLY163 / TLY164	25	4	70	-20~75	-30~100
TLUY163 / TLUY164	25	4	70	-20~75	-30~100
TLO163 / TLO164	25	4	70	-20~75	-30~100
TLS163 / TLS164	25	4	70	-20~75	-30~100
TLUR163 / TLUR164	25	4	55	-20~75	-30~100

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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)  
163 SERIES (Colored Transparent Lens)

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>
TLPG163	555	20	15	6.0	20	20	2.15	2.8	20	5	4
TLG163	565	25	15	10	30	20	2.15	2.8	20	5	4
TLUG163	565	25	15	20	70	20	2.15	2.8	20	5	4
TLY163	585	32	15	10	20	20	2.05	2.8	20	100	4
TLUY163	585	32	15	20	40	20	2.05	2.8	20	100	4
TLO163	610	35	15	10	40	20	2.05	2.8	20	100	4
TLS163	635	40	15	10	40	20	2.05	2.8	20	100	4
TLUR163	660	25	15	20	40	20	1.75	2.2	20	100	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

164 SERIES (Colored Lusterless Lens)

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>
TLPG164	555	20	20	3.0	6.0	20	2.15	2.8	20	5	4
TLG164	565	25	20	5.0	15	20	2.15	2.8	20	5	4
TLUG164	565	25	20	10	30	20	2.15	2.8	20	5	4
TLPY164	570	25	20	1.5	3.0	20	2.15	2.8	20	100	4
TLY164	585	32	20	5.0	10	20	2.05	2.8	20	100	4
TLUY164	585	32	20	10	20	20	2.05	2.8	20	100	4
TLO164	610	35	20	9.0	20	20	2.05	2.8	20	100	4
TLS164	635	40	20	5.0	20	20	2.05	2.8	20	100	4
TLUR164	660	25	20	10	20	20	1.75	2.2	20	100	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

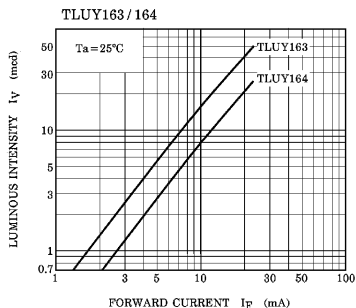
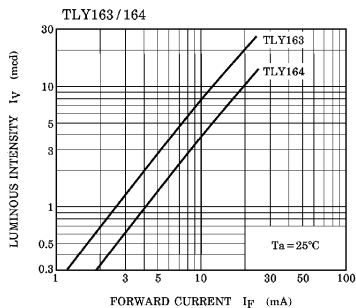
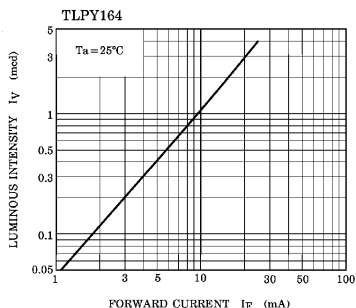
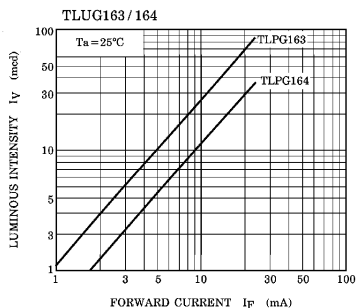
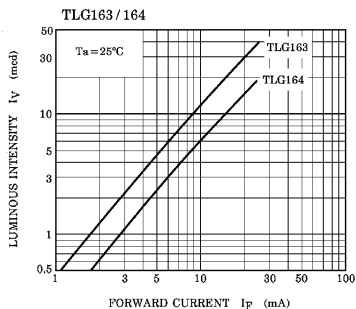
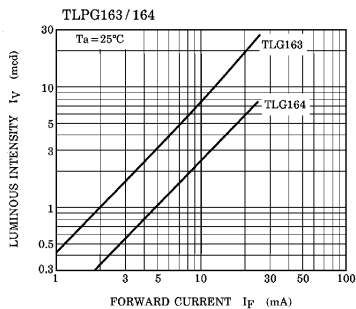
**PRECAUTION**

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 at a distance of 5mm from the body of the device.  
Soldering shall be performed after lead forming.

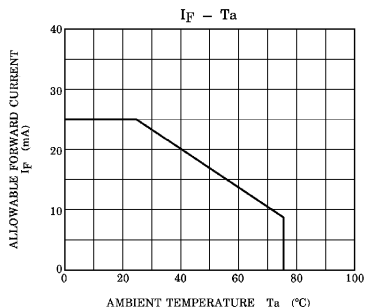
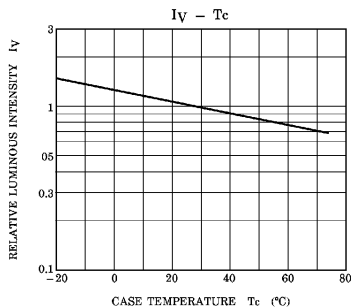
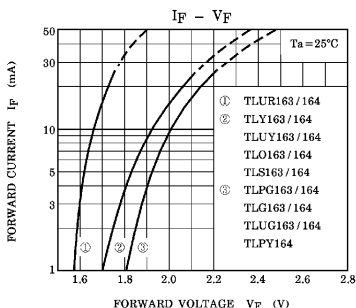
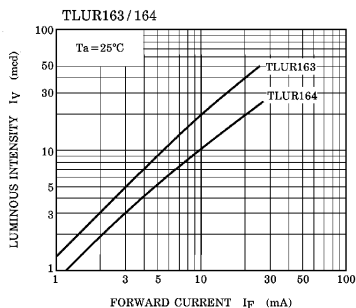
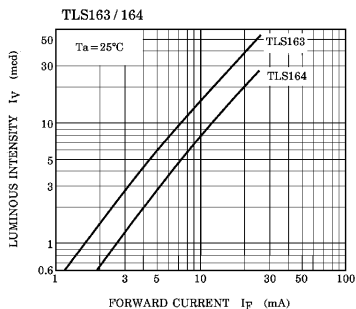
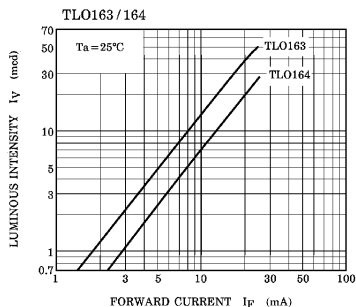
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$I_V - I_F$

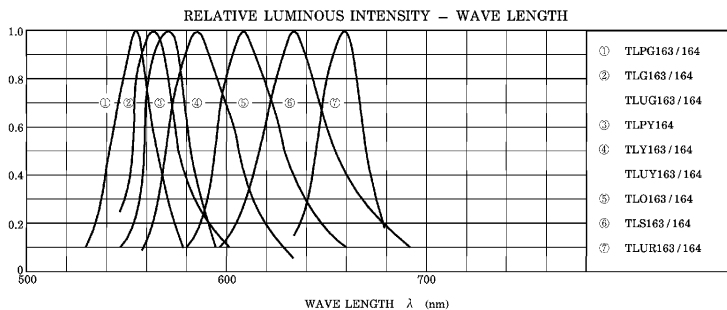


(TLG163)

$I_V - I_F$



(TLG163)



RADIATION PATTERN

- ①: TL□163  
②: TL□164

$T_a = 25^\circ\text{C}$

