

TOSHIBA LED LAMP

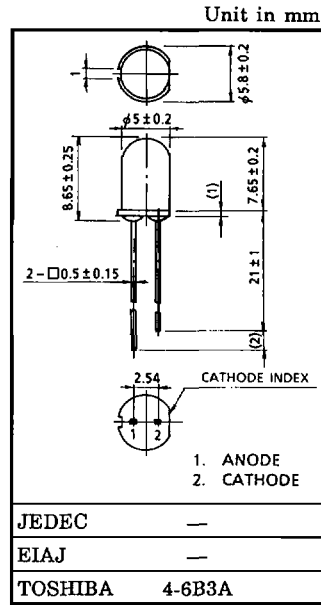
TLG113AP, TLG114AP, TLO113AP, TLO114AP
 TLR113AP, TLR114AP, TLS113P, TLS114P
 TLUR113P, TLUR114P, TLY113AP, TLY114AP

PANEL CIRCUIT INDICATOR

- All Plastic Mold Type
 - TL□ 113AP : Colored Transparent Lens
 - TL□ 114AP : Colored Lusterless 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
TLG113AP/TLG114AP	GaP	Green
TLY113AP/TLY114AP	GaAsP	Yellow
TLO113AP/TLO114AP	GaAsP	Orange
TLS113P/TLS114P	GaAsP	Red
TLUR113P/TLUR114P	GaAlAs	
TLR113AP/TLR114AP	GaP	



Weight : 0.31g

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)
TLG113AP/TLG114AP	25	4	100	-20~75	-30~100
TLY113AP/TLY114AP	25	4	100	-20~75	-30~100
TLO113AP/TLO114AP	25	4	100	-20~75	-30~100
TLS113P/TLS114P	25	4	100	-20~75	-30~100
TLUR113P/TLUR114P	25	4	55	-20~75	-30~100
TLR113AP/TLR114AP	20	4	90	-20~75	-30~100

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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)
113P, 1113AP SERIES (Colored transparent lens)

PRODUCT NAME	EMISSION SPECTRUM			LUMINOUS INTENSITY I _V			FORWARD VOLTAGE V _F			REVERSE CURRENT I _R	
	λ _p	Δλ	I _F	MIN.	TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R
TLG113AP	565	25	15	6.5	30	15	2.15	2.8	20	5	4
TLY113AP	585	32	15	2.8	20	15	2.05	2.8	20	100	4
TLO113AP	610	35	15	1.0	20	15	2.05	2.8	20	100	4
TLS113P	635	40	15	1.2	25	15	2.05	2.8	20	100	4
TLUR113P	660	25	15	5.0	30	15	1.75	2.2	20	100	4
TLR113AP	700	100	15	1.5	7.0	15	2.15	2.8	20	5	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

114P, 114AP SERIES (Colored lusterless lens)

PRODUCT NAME	EMISSION SPECTRUM			LUMINOUS INTENSITY I _V			FORWARD VOLTAGE V _F			REVERSE CURRENT I _R	
	λ _p	Δλ	I _F	MIN.	TYP.	I _F	TYP.	MAX.	I _F	MAX.	V _R
TLG144AP	565	25	15	2.4	8.0	15	2.15	2.8	20	5	4
TLY114AP	585	32	15	1.2	6.0	15	2.05	2.8	20	100	4
TLO114AP	610	35	15	1.2	6.0	15	2.05	2.8	20	100	4
TLS114P	635	40	15	3.0	8.0	15	2.05	2.8	20	100	4
TLUR114P	660	25	15	4.0	15	15	1.75	2.2	20	100	4
TLR114AP	700	100	15	0.8	3.0	15	2.15	2.8	20	5	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 up to 5mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.

$I_v - I_F$

