

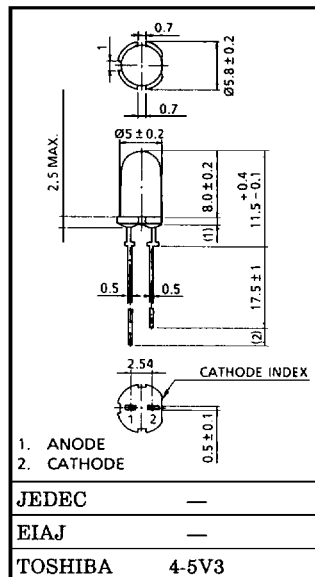
## TOSHIBA LED LAMP

**TLG133A, TLG134A, TLO133A, TLO134A, TLPG133A  
 TLPG134A, TLR133A, TLR134A, TLS133A, TLS134A  
 TLR133A, TLR134A, TLY133A, TLY134A**

### PANEL CIRCUIT INDICATOR

Unit in mm

- All Plastic Mold Type
  - TL□133A : Colored Transparent Lens
  - TL□134A : Colored Diffused Lens
- High Intensity & Moderate Radiation Angle
  - Half Angle = ±15 deg. (Typ.) (Limits for 50% of I<sub>F</sub>)
  - Recommended Forward Current : I<sub>F</sub>=15~20mA (DC)
- Fast Response Time, Capable of Pulse Operation.



### MATERIALS

PRODUCT NAME	ITEM	MATERIALS	LIGHT EMITTING COLOR
TLPG133A / TLPG134A		GaP	Pure Green
TLG133A / TLG134A		GaP	Green
TLY133A / TLY134A		GaAsP	Yellow
TLO133A / TLO134A		GaAsP	Orange
TLS133A / TLS134A		GaAsP	Red
TLUR133A / TLUR134A		GaAsAs	
TLR133A / TLR134A		GaP	

### MAXIMUM RATINGS (T<sub>a</sub> = 25°C)

PRODUCT NAME	ITEM	FORWARD CURRENT I <sub>F</sub> (mA)	REVERSE VOLTAGE V <sub>R</sub> (V)	POWER DISSIPATION P <sub>D</sub> (mW)	OPERATING TEMPERATURE RANGE T <sub>opr</sub> (°C)	STORAGE TEMPERATURE RANGE T <sub>stg</sub> (°C)
TLPG133A / TLPG134A		25	4	70	-20~75	-30~100
TLG133A / TLG134A		25	4	70	-20~75	-30~100
TLY133A / TLY134A		25	4	70	-20~75	-30~100
TLO133A / TLO134A		25	4	70	-20~75	-30~100
TLS133A / TLS134A		25	4	70	-20~75	-30~100
TLUR133A / TLUR134A		25	4	55	-20~75	-30~100
TLR133A / TLR134A		25	4	70	-20~75	-30~100

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ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)  
 133A 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>
T LPG133A	555	20	15	8.0	25	15	2.15	2.8	20	100	4
TLG133A	565	25	15	17	80	15	2.15	2.8	20	100	4
TLY133A	585	32	15	10	50	15	2.05	2.8	20	100	4
TLO133A	610	35	15	10	35	15	2.05	2.8	20	100	4
TLS133A	635	40	15	10	35	15	2.05	2.8	20	100	4
TLUR133A	660	25	20	17	40	20	1.75	2.2	20	100	4
TLR133A	700	100	15	5.0	15	15	2.15	2.8	20	100	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

## 134A 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>
T LPG134A	555	20	15	4.0	15	15	2.15	2.8	20	100	4
TLG134A	565	25	15	6.0	30	15	2.15	2.8	20	100	4
TLY134A	585	32	15	5.0	20	15	2.05	2.8	20	100	4
TLO134A	610	35	15	4.0	15	15	2.05	2.8	20	100	4
TLS134A	635	40	15	4.0	15	15	2.05	2.8	20	100	4
TLUR134A	660	25	20	7.0	20	20	1.75	2.2	20	100	4
TLR134A	700	100	15	2.0	6.0	15	2.15	2.8	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 : at below from the lead stopper)
- 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.

**$I_v - I_F$**

