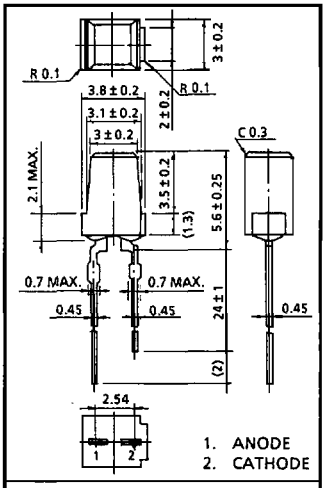
TOSHIBA LED LAMP

TLG209, TLPG209, TLR209, TLY209

PANEL CIRCUIT INDICATOR

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	4-3D1A

Weight : 0.13g

- All Plastic Mold Type

  Rectangular Type (Surface Size 3×3mm)
- Low Drive Current, High Intensity Light Emission.

  Recommended Forward Current : I_F=10~15mA (DC)
- Fast Response Time, Capable of Pulse Operation.

MATERIALS

ITEM / PRODUCT NAME	MATERIALS	LIGHT EMITTING COLOR
TLPG209	GaP	Pure Green
TLG209	GaP	Green
TLY209	GaAsP	Yellow
TLR209	GaP	Red

MAXIMUM RATINGS (Ta = 25°C)

ITEM / 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)
TLPG209	25	4	70	−20~75	−30~100
TLG209	25	4	70	−20~75	−30~100
TLY209	25	4	70	−20~75	−30~100
TLR209	20	4	56	−20~75	−30~100

ELECTRO-OPTICAL CHARACTERISTICS (Ta = 25°C)

PRODUCT NAME	EMISSION SPECTRUM			LUMINOUS INTENSITY I_V			FORWARD VOLTAGE V_F			REVERSE CURRENT I_R	
	λ_p	$\Delta\lambda$	I_F	MIN.	TYP.	I_F	TYP.	MAX.	I_F	MAX.	V_R
TLPG209	555	25	10	0.4	1.0	10	2.15	2.8	20	1	4
TLG209	565	25	10	0.8	1.5	10	2.15	2.8	20	5	4
TLY209	585	32	10	0.5	1.3	10	2.05	2.8	20	100	4
TLR209	700	100	10	0.4	0.8	10	2.15	2.8	20	5	4
Unit	nm		mA	mcd		mA	V		mA	μA	V

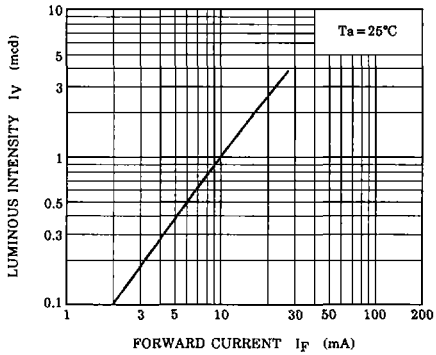
PRECAUTION

Please be careful of the followings.

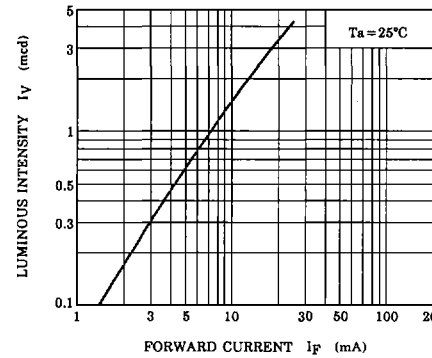
- Soldering temperature : 260°C MAX. Soldering time : 3s MAX.
  (Soldering portion of lead : up to 2mm from the body of the device)
- If the lead is formed, the lead should be formed up to 5mm from the body of the device without forming stress to the resin. Soldering should be performed after lead forming.

$I_V - I_F$

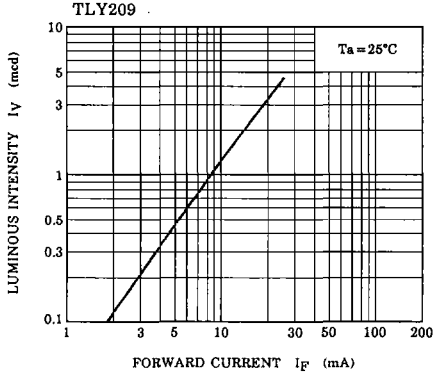
TLPG209



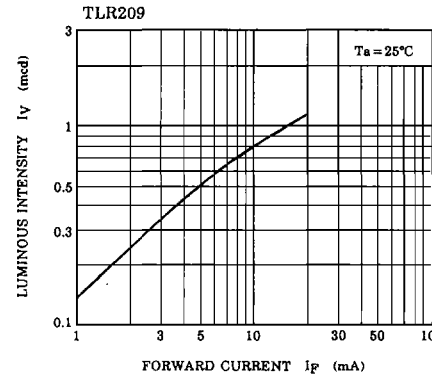
TLG209



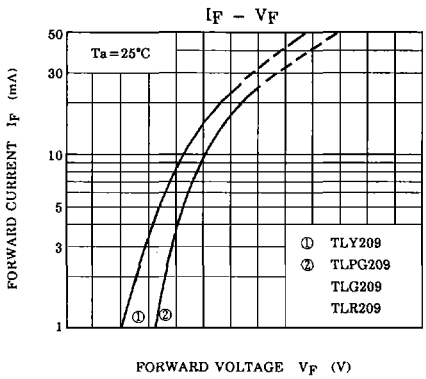
TLY209



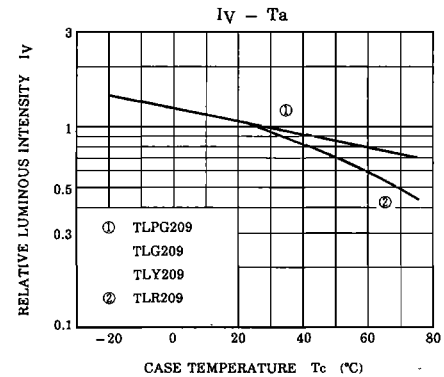
TLR209



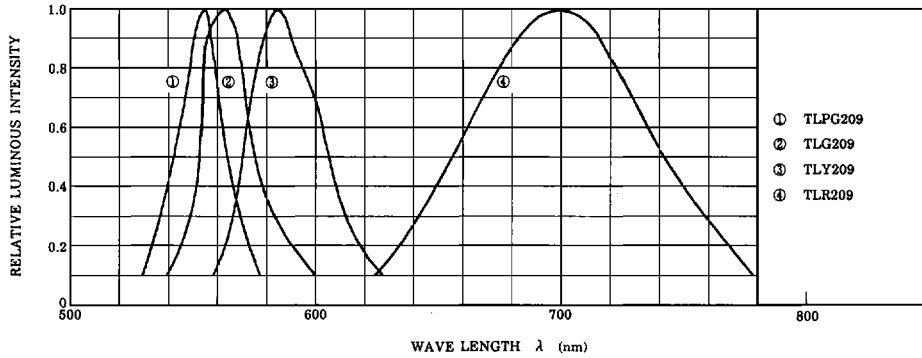
$I_F - V_F$



$I_V - Ta$



RELATIVE LUMINOUS INTENSITY – WAVE LENGTH



I_F – Ta