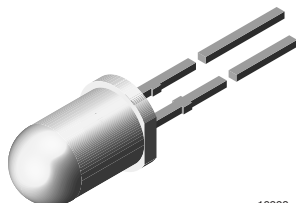


Low Current LED in $\varnothing$ 5 mm Tinted Diffused Package



19223

FEATURES

- Low power consumption
- High brightness
- CMOS/MOS compatible
- Specified at $I_F = 2$ mA
- Luminous intensity categorized
- Yellow and green color categorized
- Lead (Pb)-free device

PRODUCT GROUP AND PACKAGE DATA

- Product group: LED
- Package: 5 mm
- Product series: low current
- Angle of half intensity: $\pm 25^\circ$

APPLICATIONS

- Low power DC circuits

PARTS TABLE

PART	COLOR, LUMINOUS INTENSITY	TECHNOLOGY
TLLR5400	Red, $I_V > 0.63$ mcd	GaAsP on GaP
TLLR5401	Red, $I_V > 1$ mcd	GaAsP on GaP
TLLY5400	Yellow, $I_V > 0.63$ mcd	GaAsP on GaP
TLLY5401	Yellow, $I_V > 1$ mcd	GaAsP on GaP
TLLG5400	Green, $I_V > 0.63$ mcd	GaP on GaP
TLLG5401	Green, $I_V > 1$ mcd	GaP on GaP

ABSOLUTE MAXIMUM RATINGS¹⁾ TLL.540.

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	6	V
DC Forward current	$T_{amb} \leq 90^\circ\text{C}$	I_F	7	mA
Surge forward current	$t_p \leq 10 \mu\text{s}$	I_{FSM}	0.15	A
Power dissipation	$T_{amb} \leq 90^\circ\text{C}$	P_V	20	mW
Junction temperature		T_j	100	$^\circ\text{C}$
Operating temperature range		T_{amb}	- 40 to + 100	$^\circ\text{C}$
Storage temperature range		T_{stg}	- 55 to + 100	$^\circ\text{C}$
Soldering temperature	$t \leq 5$ s, 2 mm from body	T_{sd}	260	$^\circ\text{C}$
Thermal resistance junction/ambient		R_{thJA}	500	K/W

Note:

¹⁾ $T_{amb} = 25^\circ\text{C}$, unless otherwise specified

OPTICAL AND ELECTRICAL CHARACTERISTICS¹⁾ TLLR540., RED

PARAMETER	TEST CONDITION	PART	SYMBOL	MIN	TYP.	MAX	UNIT
Luminous intensity ²⁾	$I_F = 2 \text{ mA}$	TLLR5400	I_V	0.63	1.2		mcd
		TLLR5401	I_V	1	2		mcd
Dominant wavelength	$I_F = 2 \text{ mA}$		λ_d	612		625	nm
Peak wavelength	$I_F = 2 \text{ mA}$		λ_p		635		nm
Angle of half intensity	$I_F = 2 \text{ mA}$		φ		± 25		deg
Forward voltage	$I_F = 2 \text{ mA}$		V_F		1.9	2.4	V
Reverse voltage	$I_R = 10 \text{ }\mu\text{A}$		V_R	6	20		V
Junction capacitance	$V_R = 0, f = 1 \text{ MHz}$		C_j		50		pF

Note:

¹⁾ $T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified²⁾ in one packing unit $I_{Vmin}/I_{Vmax} \leq 0.5$ **OPTICAL AND ELECTRICAL CHARACTERISTICS¹⁾ TLLY540., YELLOW**

PARAMETER	TEST CONDITION	PART	SYMBOL	MIN	TYP.	MAX	UNIT
Luminous intensity ²⁾	$I_F = 2 \text{ mA}$	TLLY5400	I_V	0.63	1.2		mcd
		TLLY5401	I_V	1	2		mcd
Dominant wavelength	$I_F = 2 \text{ mA}$		λ_d	581		594	nm
Peak wavelength	$I_F = 2 \text{ mA}$		λ_p		585		nm
Angle of half intensity	$I_F = 2 \text{ mA}$		φ		± 25		deg
Forward voltage	$I_F = 2 \text{ mA}$		V_F		2.4	2.9	V
Reverse voltage	$I_R = 10 \text{ }\mu\text{A}$		V_R	6	20		V
Junction capacitance	$V_R = 0, f = 1 \text{ MHz}$		C_j		50		pF

Note:

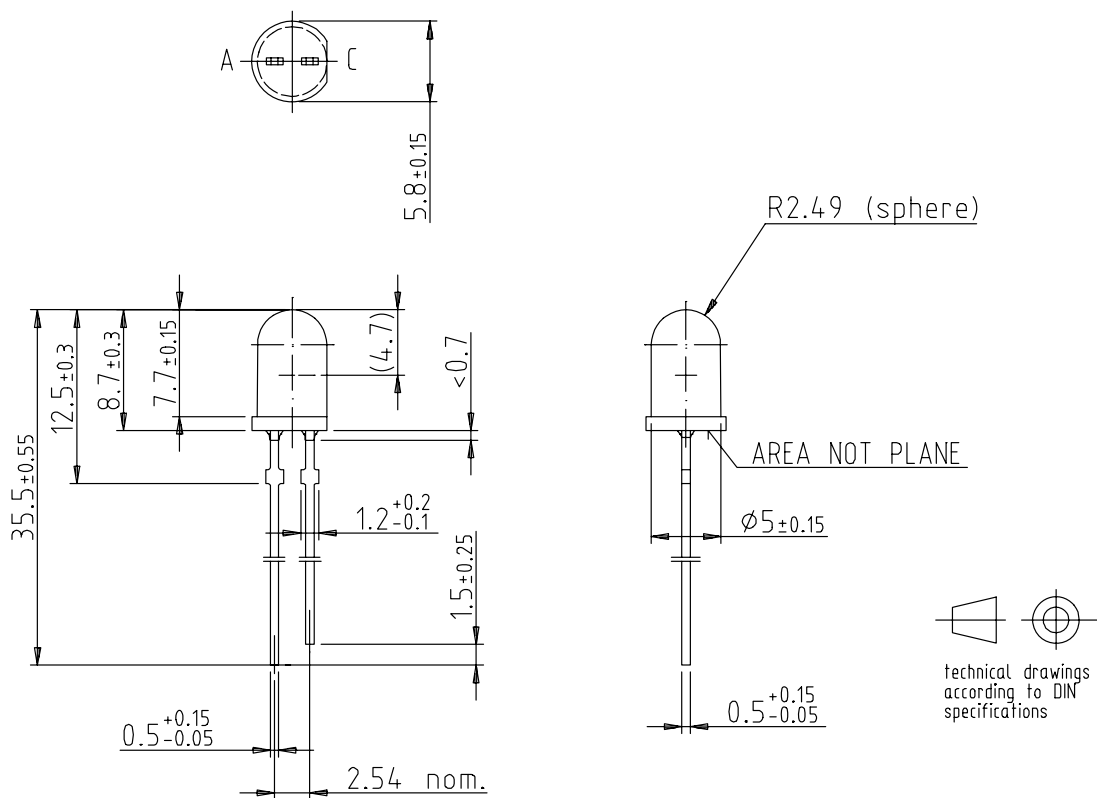
¹⁾ $T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified²⁾ in one packing unit $I_{Vmin}/I_{Vmax} \leq 0.5$ **OPTICAL AND ELECTRICAL CHARACTERISTICS¹⁾ TLLG540., GREEN**

PARAMETER	TEST CONDITION	PART	SYMBOL	MIN	TYP.	MAX	UNIT
Luminous intensity ²⁾	$I_F = 2 \text{ mA}$	TLLG5400	I_V	0.63	1.2		mcd
		TLLG5401	I_V	1	2		mcd
Dominant wavelength	$I_F = 2 \text{ mA}$		λ_d	562		575	nm
Peak wavelength	$I_F = 2 \text{ mA}$		λ_p		565		nm
Angle of half intensity	$I_F = 2 \text{ mA}$		φ		± 25		deg
Forward voltage	$I_F = 2 \text{ mA}$		V_F		1.9	2.4	V
Reverse voltage	$I_R = 10 \text{ }\mu\text{A}$		V_R	6	20		V
Junction capacitance	$V_R = 0, f = 1 \text{ MHz}$		C_j		50		pF

Note:

¹⁾ $T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified²⁾ in one packing unit $I_{Vmin}/I_{Vmax} \leq 0.5$

PACKAGE DIMENSIONS in millimeters



95 10916