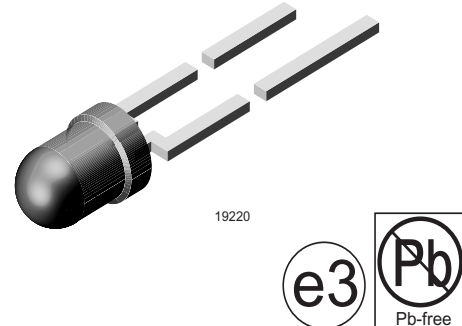


Low Current LED in \varnothing 3 mm Tinted Diffused Package

Features

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



Applications

Low power DC circuits

Parts Table

Part	Color, Luminous Intensity	Angle of Half Intensity ($\pm\phi$)	Technology
TLLR4400	Red, $I_V > 0.63$ mcd	25 °	GaAsP on GaP
TLLR4401	Red, $I_V > 1$ mcd	25 °	GaAsP on GaP
TLLY4400	Yellow, $I_V > 0.63$ mcd	25 °	GaAsP on GaP
TLLY4401	Yellow, $I_V > 1$ mcd	25 °	GaAsP on GaP
TLLG4400	Green, $I_V > 0.63$ mcd	25 °	GaP on GaP
TLLG4401	Green, $I_V > 1$ mcd	25 °	GaP on GaP

Absolute Maximum Ratings

$T_{amb} = 25$ °C, unless otherwise specified

TLL.440.

Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		V_R	6	V
DC Forward current		I_F	7	mA
Surge forward current	$t_p \leq 10$ μ s	I_{FSM}	0.15	A
Power dissipation	$T_{amb} \leq 84$ °C	P_V	20	mW
Junction temperature		T_j	100	°C
Operating temperature range		T_{amb}	- 40 to + 100	°C
Storage temperature range		T_{stg}	- 55 to + 100	°C
Soldering temperature	$t \leq 5$ s, 2 mm from body	T_{sd}	260	°C
Thermal resistance junction/ambient		R_{thJA}	800	K/W

Optical and Electrical Characteristics

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

Red

TLLR440.

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Luminous intensity ¹⁾	$I_F = 2\text{ mA}$	TLLR4400	I_V	0.63	1.2		mcd
		TLLR4401	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

¹⁾ in one Packing Unit $I_{Vmin}/I_{Vmax} \leq 0.5$

Yellow

TLLY440.

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Luminous intensity ¹⁾	$I_F = 2\text{ mA}$	TLLY4400	I_V	0.63	1.2		mcd
		TLLY4401	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

¹⁾ in one Packing Unit $I_{Vmin}/I_{Vmax} \leq 0.5$

Green

TLLG440.

Parameter	Test condition	Part	Symbol	Min	Typ.	Max	Unit
Luminous intensity ¹⁾	$I_F = 2\text{ mA}$	TLLG4400	I_V	0.63	1.2		mcd
		TLLG4401	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

¹⁾ in one Packing Unit $I_{Vmin}/I_{Vmax} \leq 0.5$

Package Dimensions in mm

