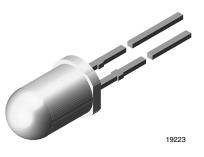
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Universal LED in Ø 5 mm Tinted Diffused Package



PRODUCT GROUP AND PACKAGE DATA

- Product group: LED
- · Package: 5 mm
- Product series: standard
- Angle of half intensity: ± 30°

FEATURES

- · For DC and pulse operation
- · Luminous intensity categorized
- Standard T-1¾ package
- TLUR540. with stand-offs
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

· General indicating and lighting purposes

PARTS TABLE														
PART	COLOR	LUMINOUS INTENSITY (mcd)		at I _F (mA)	WAVELENGTH (nm)		at I _F (mA)	FORWARD VOLTAGE (V)		at I _F (mA)	TECHNOLOGY			
		MIN.	TYP.	MAX.		MIN.	TYP.	MAX.		MIN.	TYP.	MAX.		
TLUR5400	Red	4	15	-	10	-	630	-	10	-	2	3	20	GaAsP on GaAs
TLUR5401	Red	4	15	32	10	-	630	-	10	-	2	3	20	GaAsP on GaAs

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25 \text{ °C}$ unless otherwise specified) TLUR540.							
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT			
Reverse voltage		V _R	6	V			
DC forward current		۱ _F	20	mA			
Surge forward current	t _p ≤ 10 μs	I _{FSM}	1	А			
Power dissipation	T _{amb} ≤ 65 °C	P _V	60	mW			
Junction temperature		Тj	100	°C			
Operating temperature range		T _{amb}	-40 to +100	°C			
Storage temperature range		T _{stg}	-55 to +100	°C			
Soldering temperature	$t \le 5$ s, 2 mm from body	T _{sd}	260	°C			
Thermal resistance junction to ambient		R _{thJA}	500	K/W			



RoHS

COMPLIANT

HALOGEN

FREE

<u>GREEN</u>

(5-2008)



www.vishay.com

TLUR5400, TLUR5401

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OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_{amb} = 25$ °C, unless otherwise specified) TLUR540., RED							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Luminous intensity (1)	L 10 mA	TLUR5400	Ι _V	4	15		mcd
	I _F = 10 mA	TLUR5401	Ι _V	4	15	32	mcd
Dominant wavelength	I _F = 10 mA		λ_d	-	630	-	nm
Peak wavelength	I _F = 10 mA		λρ	-	640	-	nm
Angle of half intensity	I _F = 10 mA		φ	-	± 30	-	0
Forward voltage	I _F = 20 mA		V _F	-	2	3	V
Reverse voltage	I _R = 10 μA		V _R	6	15	-	V
Junction capacitance	V _R = 0 V, f = 1 MHz		Cj	-	50	-	pF

Note

 $^{(1)}~$ In one packing unit $I_{Vmin.}/I_{Vmax.} \leq 0.5$

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

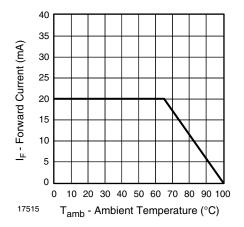


Fig. 1 - Forward Current vs. Ambient Temperature

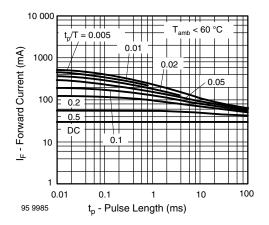


Fig. 2 - Pulse Forward Current vs. Pulse Duration

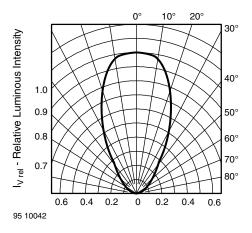


Fig. 3 - Relative Luminous Intensity vs. Angular Displacement

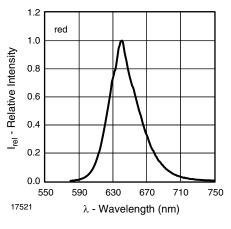


Fig. 4 - Relative Intensity vs. Wavelength

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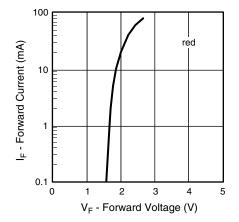


Fig. 5 - Forward Current vs. Forward Voltage

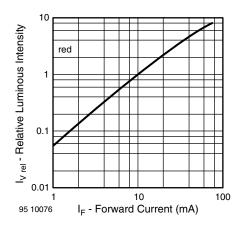


Fig. 6 - Relative Luminous Intensity vs. Forward Current

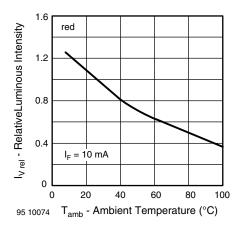


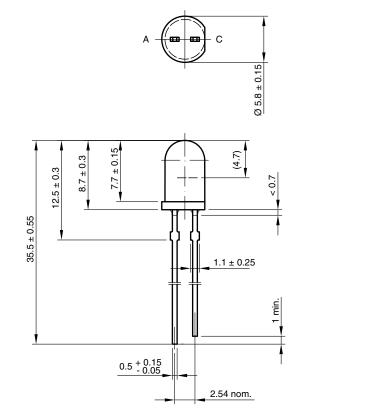
Fig. 7 - Relative Luminous Intensity vs. Ambient Temperature

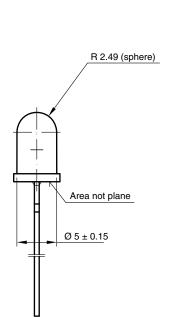
Rev. 2.3, 06-Sep-2022

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PACKAGE DIMENSIONS in millimeters





0.5 + 0.15



technical drawings according to DIN specifications

6.544-5258.02-4 Issue: 7; 23.07.10 95 10916

PACKING INFORMATION								
PART	BULK	TAPE AND REEL	AMMOPACK					
TLUR540x	4000	-	-					

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