



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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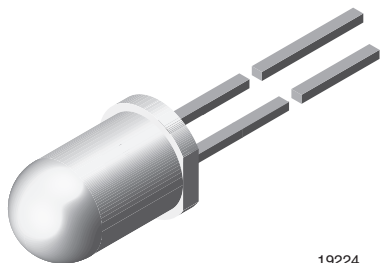
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Universal LED in Ø 5 mm Tinted Diffused Package



19224

FEATURES

- For DC and pulse operation
- Luminous intensity categorized
- Standard T-1 1/4 package
- TLUR640. without stand-offs
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

PRODUCT GROUP AND PACKAGE DATA

- Product group: LED
- Package: 5 mm
- Product series: standard
- Angle of half intensity: $\pm 30^\circ$

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.		
TLUR6400	Red	4	15	-	10	-	630	-	10	-	2	3	20	GaAsP on GaAs
TLUR6401	Red	4	15	32	10	-	630	-	10	-	2	3	20	GaAsP on GaAs

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25^\circ\text{C}$, unless otherwise specified)

TLUR6401

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	6	V
DC forward current		I_F	20	mA
Surge forward current	$t_p \leq 10 \mu\text{s}$	I_{FSM}	1	A
Power dissipation	$T_{amb} \leq 65^\circ\text{C}$	P_V	60	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	$t \leq 5 \text{ s}$, 2 mm from body	T_{sd}	260	$^\circ\text{C}$
Thermal resistance junction/ambient		R_{thJA}	500	K/W

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ\text{C}$, unless otherwise specified)

TLUR640., RED

PARAMETER	TEST CONDITION	PART	MIN.	TYP.	MAX.	UNIT	MIN.
Luminous intensity ⁽¹⁾	$I_F = 10 \text{ mA}$	TLUR6400	I_V	4	15	-	mcd
		TLUR6401	I_V	4	15	32	mcd
Dominant wavelength	$I_F = 10 \text{ mA}$		λ_d	-	630	-	nm
Peak wavelength	$I_F = 10 \text{ mA}$		λ_p	-	640	-	nm
Angle of half intensity	$I_F = 10 \text{ mA}$		ϕ	-	± 30	-	deg
Forward voltage	$I_F = 20 \text{ mA}$		V_F	-	2	3	V
Reverse voltage	$I_R = 10 \mu\text{A}$		V_R	6	15	-	V
Junction capacitance	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$		C_j	-	50	-	pF

Note

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

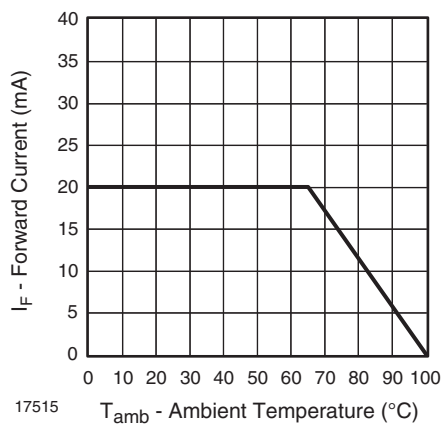
TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)


Fig. 1 - Forward Current vs. Ambient Temperature

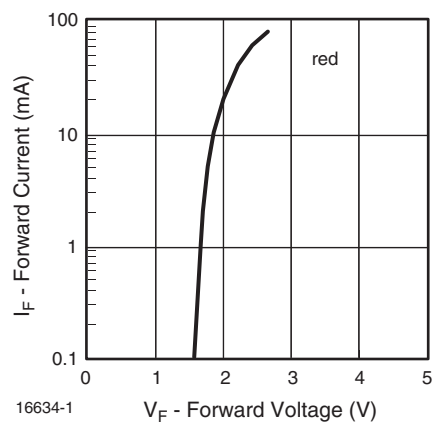


Fig. 4 - Forward Current vs. Forward Voltage

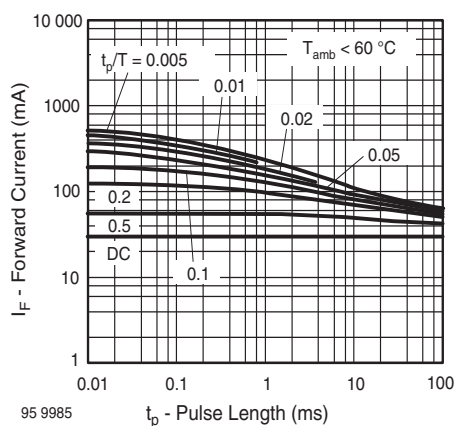


Fig. 2 - Pulse Forward Current vs. Pulse Duration

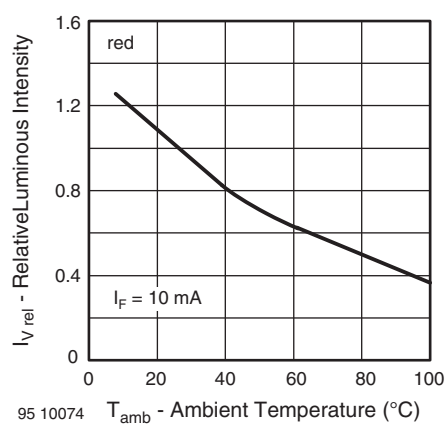


Fig. 5 - Relative Luminous Intensity vs. Ambient Temperature

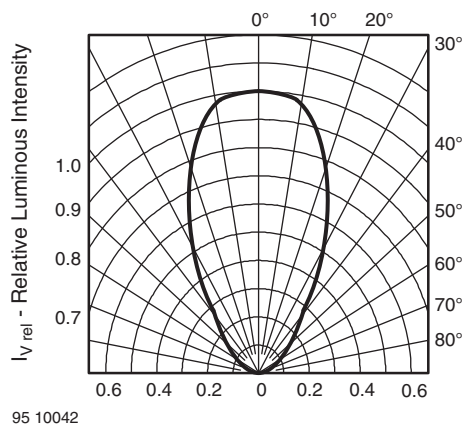


Fig. 3 - Relative Luminous Intensity vs. Angular Displacement

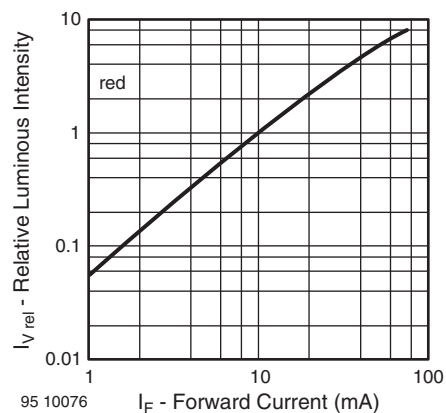


Fig. 6 - Relative Luminous Intensity vs. Forward Current

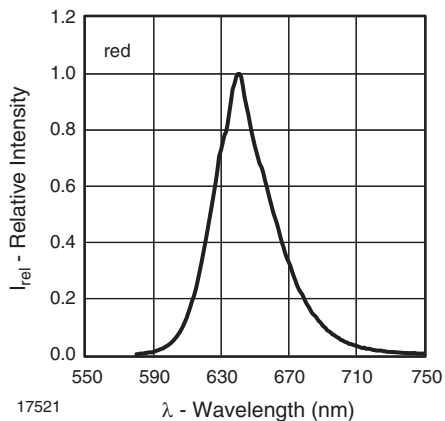
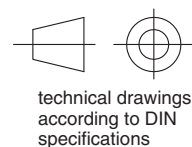
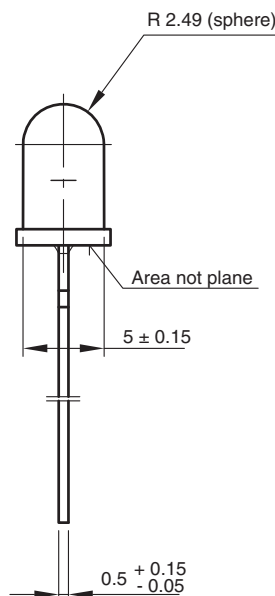
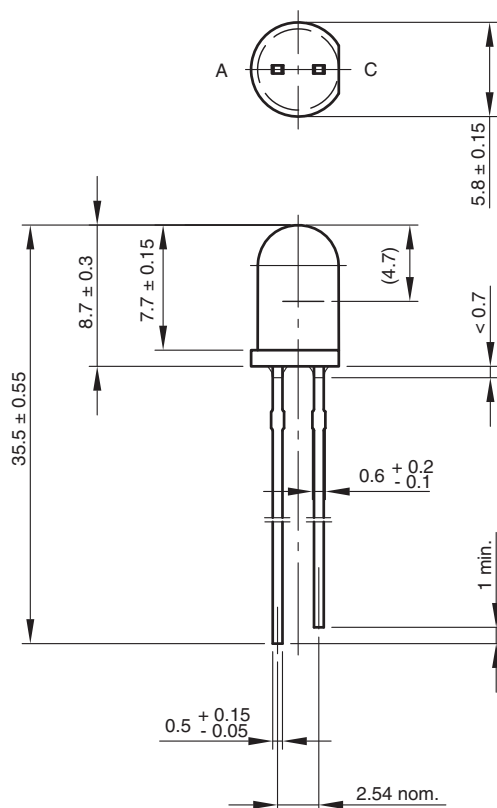


Fig. 7 - Relative Intensity vs. Wavelength

PACKAGE DIMENSIONS in millimeters


6.544-5259.02-4
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95 10917



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