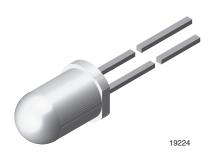


Vishay Semiconductors

Universal LED in Ø 5 mm Tinted Diffused Package



PRODUCT GROUP AND PACKAGE DATA

Product group: LEDPackage: 5 mm

Product series: standard
Angle of half intensity: ± 30°

FEATURES

- For DC and pulse operation
- · Luminous intensity categorized
- Standard T-1¾ package
- TLUR640. without stand-offs
- Material categorization:
 For definitions of compliance please see www.vishay.com/doc?99912





ROHS COMPLIANT HALOGEN FREE

FREE GREEN (5-2008)

APPLICATIONS

· General indicating and lighting purposes

PARTS TABLE														
PART	COLOR	LUMINOUS INTENSITY (mcd)		at I _F	WAVELENGTH (nm)		at I _F	FORWARD VOLTAGE (V)		at I _F	TECHNOLOGY			
		MIN.	TYP.	MAX.	(mA)	MIN.	TYP.	MAX.	(mA)	MIN.	TYP.	MAX.	(IIIA)	L
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 °C, unless otherwise specified) TLUR6401								
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT				
Reverse voltage		V_{R}	6	V				
DC forward current		ΙF	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		Tj	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/ambient		R _{thJA}	500	K/W				

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_{amb} = 25 ^{\circ}C$, unless otherwise specified) TLUR640., RED									
PARAMETER	TEST CONDITION	PART	MIN.	TYP.	MAX.	UNIT	MIN.		
L	1. 10	TLUR6400	I _V	4	15	-	mcd		
Luminous intensity (1)	$I_F = 10 \text{ mA}$	TLUR6401	I _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	-	deg		
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		C _j	-	50	-	pF		

Note

(1) In one packing unit I_{Vmin.}/I_{Vmax.} ≤ 0.5

Vishay Semiconductors

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

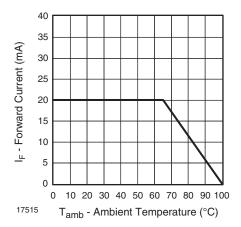


Fig. 1 - Forward Current vs. Ambient Temperature

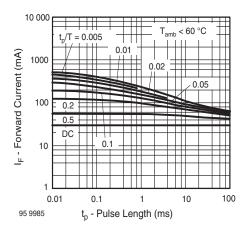


Fig. 2 - Pulse Forward Current vs. Pulse Duration

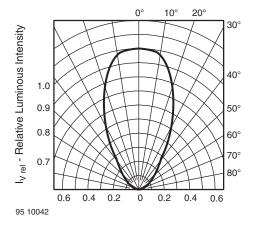


Fig. 3 - Relative Luminous Intensity vs. Angular Displacemen

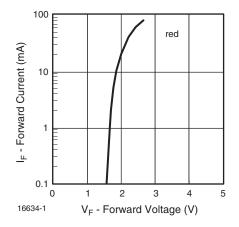


Fig. 4 - Forward Current vs. Forward Voltage

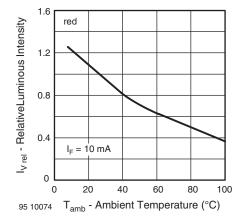


Fig. 5 - Relative Luminous Intensity vs. Ambient Temperature

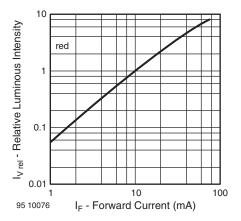
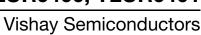


Fig. 6 - Relative Luminous Intensity vs. Forward Current





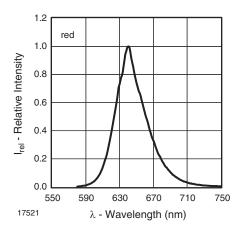
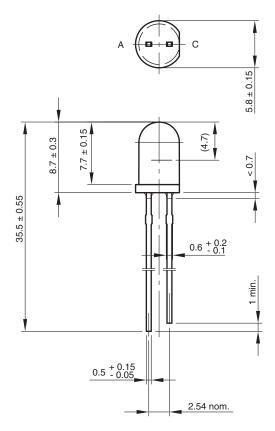
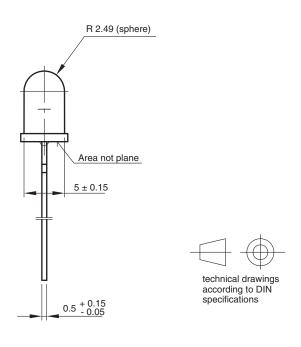


Fig. 7 - Relative Intensity vs. Wavelength

PACKAGE DIMENSIONS in millimeters



6.544-5259.02-4 Issue: 8; 19.05.09 95 10917





Legal Disclaimer Notice

Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Revision: 02-Oct-12 Document Number: 91000

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Standard LEDs - Through Hole category:

Click to view products by Vishay manufacturer:

Other Similar products are found below:

LTL-10254W LTL-1214A LTL-3251A LTL-4262N LTL-433P LTL-5234 LTL87HTBK LTW-87HD4B HLMP-EL30-PS0DD

1L0532V23G0TD001 NSPW500CS NTE30036 NTE30044 NTE30059 NTE3020 LD CQDP-1U3U-W5-1-K LO566UHR3-70G-A3

LP379PPG1C0G0300001 SLX-LX3044GD SLX-LX3044ID SLX-LX3044YD 1.90690.3330000 SSS-LX4673ID-410B 1L0532Y24I0TD001

264-7SYGD/S530-E2 HLMP-1301-G00FG HLMP1385 LTL-10224W LTL-1224A LTL-1234A LTL-2251AT LTL-307YE-012 LTL-403HR LTL-4222 LU7-E-B 4380H1 TLHY44K1L2 HLMP-3962-F0002 HLMP-EG1H-Y10DD HLMP-EG2H-XZ0DD HLMP-GG15-R0000 323-2SURD/S530-A3 L53SRC/E-Z L-7679C1ZGC 4302T1-5V 4306D23 4363D1/5 WP1503SRC/J4 WP153GDT WP153YDT