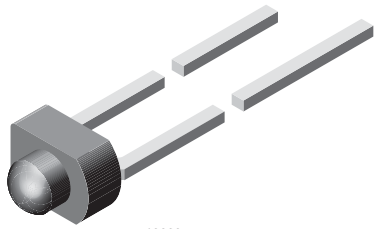
Universal LED, Ø 1.8 mm Tinted Diffused Miniplast Package



FEATURES

- For DC and pulse operation
- Luminous intensity categorized
- End-to-end stackable in centre-to-centre spacing of 0.1" (2.54 mm)
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Pb-free

e4

RoHS COMPLIANT

GREEN (5-2008)**

APPLICATIONS

- General indicating and lighting purposes

PRODUCT GROUP AND PACKAGE DATA

- Product group: LED
- Package: 1.8 mm (miniplast)
- Product series: standard
- Angle of half intensity: ± 20°

PARTS TABLE

PART	COLOR, LUMINOUS INTENSITY	TECHNOLOGY
TLUR2400	Red, I_V > 15 mcd (typ.)	GaAsP on GaP
TLUR2400-AS12	Red, I_V > 15 mcd (typ.)	GaAsP on GaP
TLUR2401	Red, I_V = (4 to 32) mcd	GaAsP on GaP
TLUR2401-AS12	Red, I_V = (4 to 32) mcd	GaAsP on GaP

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)
TLUR2400, TLUR2401

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	6	V
DC Forward current		I_F	20	mA
Surge forward current	$t_p \leq 10$ µs	I_{FSM}	0.5	A
Power dissipation	$T_{amb} \leq 55$ °C	P_V	60	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 ≤ 3 s, 2 mm from body	T_{sd}	260	°C
	t ≤ 5 s, 4 mm from body	T_{sd}	260	°C
Thermal resistance junction/ ambient		R_{thJA}	450	K/W

** Please see document “Vishay Material Category Policy”: www.vishay.com/doc?99902

OPTICAL AND ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified) **TLUR2400, TLUR2401, RED**							
PARAMETER	**TEST CONDITION**	**PART**	**SYMBOL**	**MIN.**	**TYP.**	**MAX.**	**UNIT**
Luminous intensity [1]	I_F = 10 mA	TLUR2400	I_V	4	15		mcd
		TLUR2401	I_V	4		32	mcd
Dominant wavelength	I_F = 10 mA		λ_d		630		nm
Peak wavelength	I_F = 10 mA		λ_p		640		nm
Angle of half intensity	I_F = 10 mA		φ		± 20		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, f = 1 MHz		C_j		50		pF

Note:

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

LUMINOUS INTENSITY CLASSIFICATION		
GROUP	**LIGHT INTENSITY (mcd)**	
STANDARD	**MIN.**	**MAX.**
P	4	8
Q	6.3	12.5
R	10	20
S	16	32
T	25	50

Note:

Luminous intensity is tested at a current pulse duration of 25 ms.

The above type numbers represent the order groups which include only a few brightness groups. Only one group will be shipped on each bag (there will be no mixing of two groups on each bag).

In order to ensure availability, single brightness groups will not be orderable.

In a similar manner for colors where wavelength groups are measured and binned, single wavelength groups will be shipped on any one bag.

In order to ensure availability, single wavelength groups will not be orderable.

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

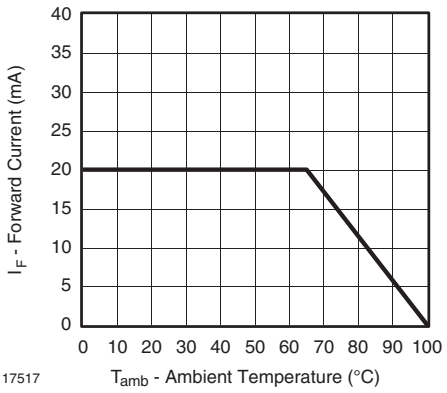


Figure 1. Forward Current vs. Ambient Temperature

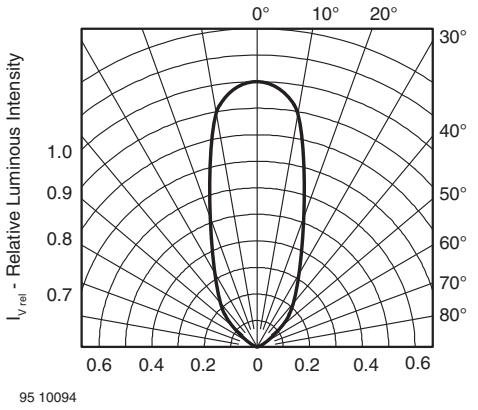


Figure 2. Rel. Luminous Intensity vs. Angular Displacement

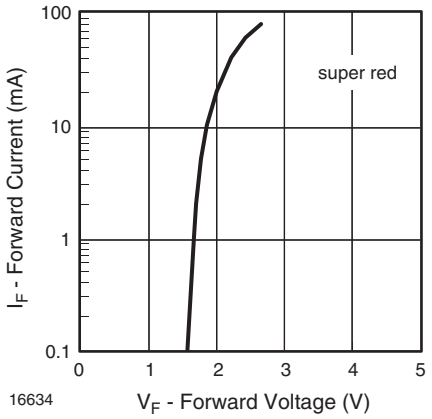


Figure 3. Forward Current vs. Forward Voltage

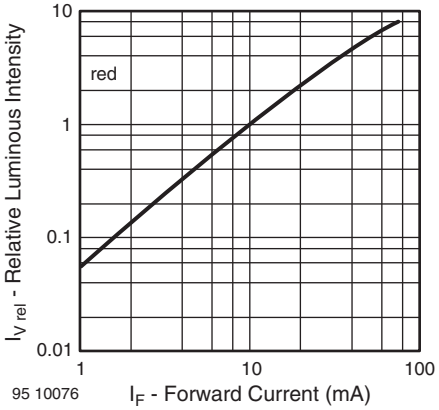


Figure 5. Relative Luminous Intensity vs. Forward Current

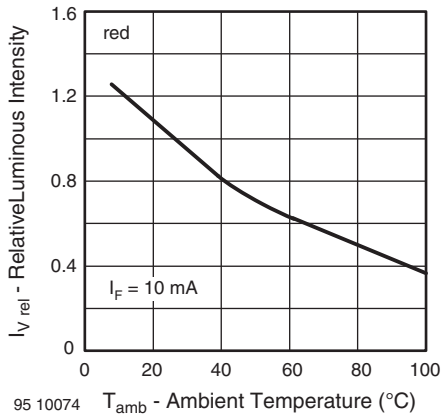


Figure 4. Rel. Luminous Intensity vs. Ambient Temperature

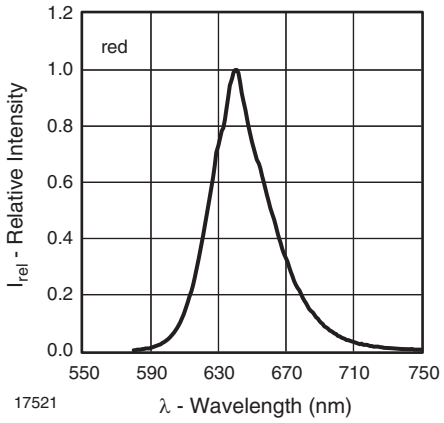
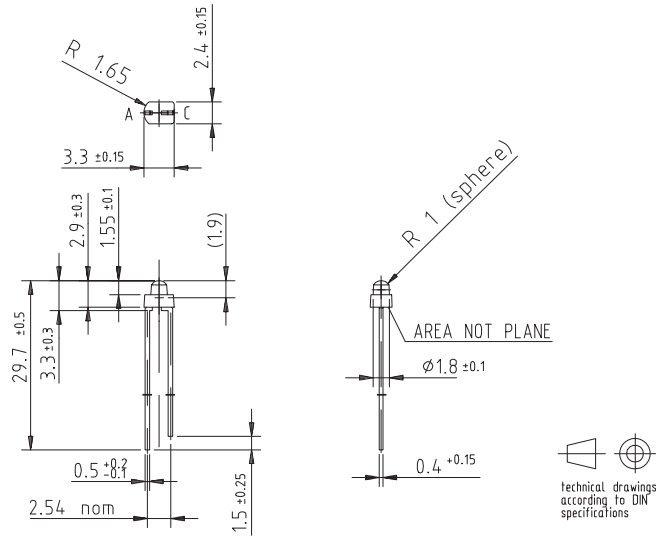


Figure 6. Relative Intensity vs. Wavelength

PACKAGE DIMENSIONS in millimeters



Drawing-No.: 6.544-5052.01-4
Issue: 1; 12.10.95
95 11262

REEL DIMENSIONS in millimeters

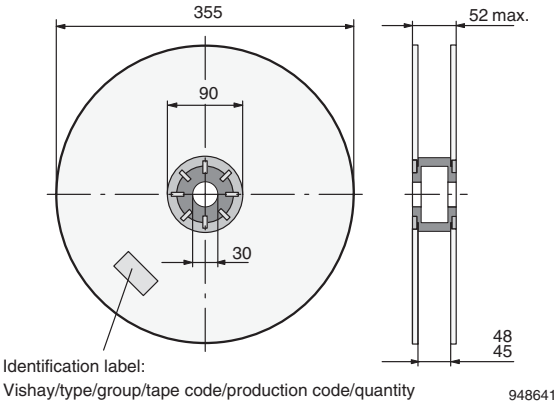


Figure 7. Reel

TAPE

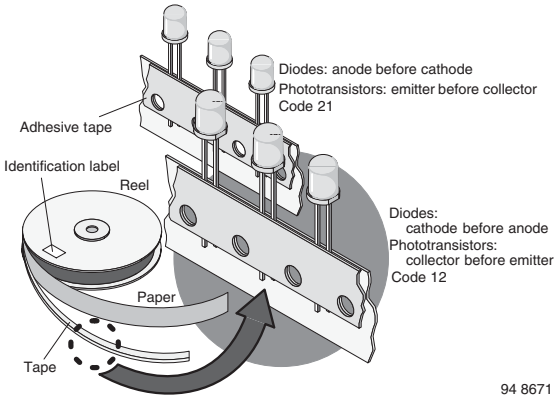
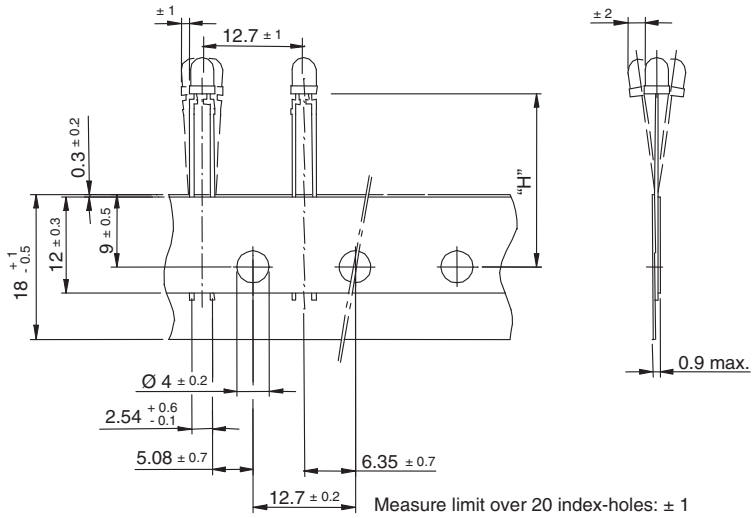


Figure 8. LED in Tape

TAPE DIMENSIONS in millimeters



Quantity per:	Reel (Mat. - No. 1764)
	2000

94 8171

Option	Dim. "H" ± 0.5 mm
AS	17.3

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