

**DISPLAY Elektronik GmbH**

# DATA SHEET

**BACKLIGHT**

**DE LP-502-B**

*Product Specification*

*Version: 1*

20.09.2016

# GENERAL SPECIFICATION

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MODEL NO. :

## DE LP-502-B

CUSTOMER P/N

Version No.	Change Description	Date
0	Original Version	14.09.2016
1	Update Spec	20.09.2016

PREPARED BY: GJJ

DATE: 20.09.2016

APPROVED BY: MH

DATE: 20.09.2016

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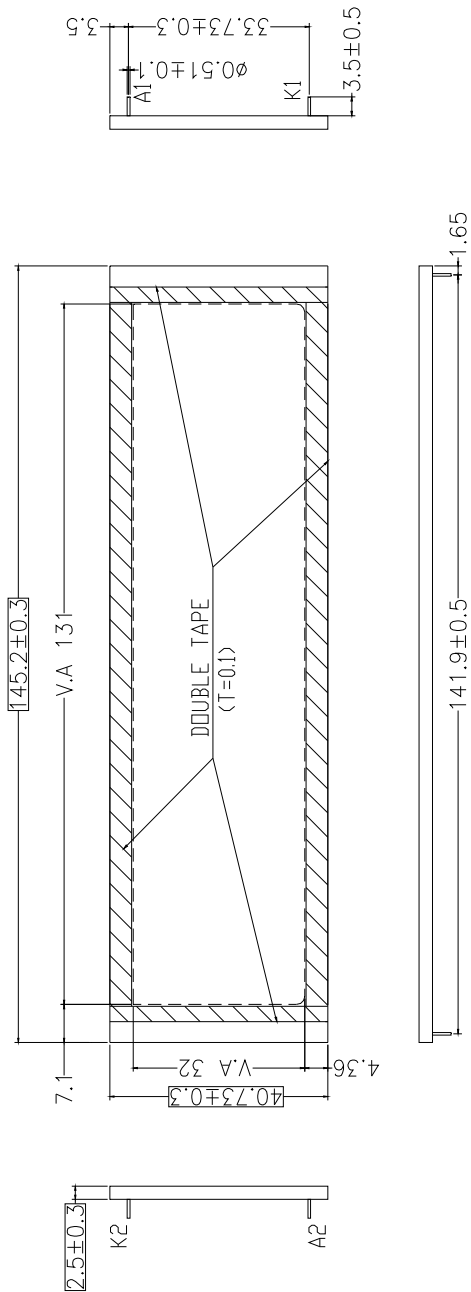
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**1. FEATURES**

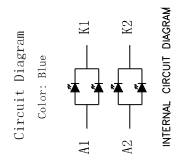
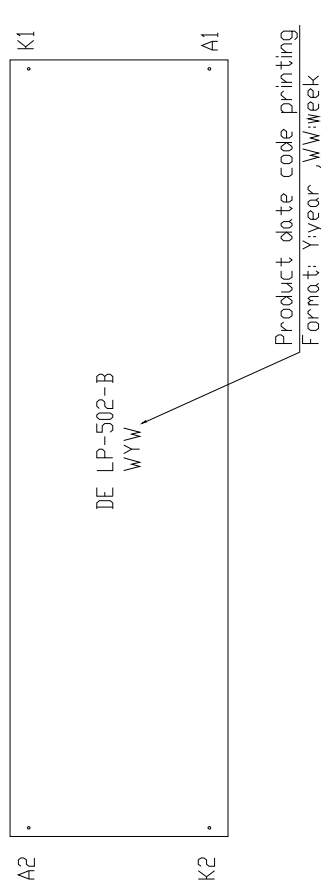
Backlight Color: Blue

RoHS: Conformed

**2. EXTERNAL DIMENSION (unit: mm)**



Remarks:  
 1. Unmarked tolerance is  $\pm 0.3$   
 2. All materials comply with RoHS  
 3.   ....critical dimension.  
 4. Operation temperature:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 Storage temperature:  $-40^{\circ}\text{C}$  to  $+90^{\circ}\text{C}$



**3. ELECTRICAL/OPTICAL SPECIFICATIONS**

## ELECTRICAL–OPTICAL CHARACTERISTICS

T<sub>a</sub>=25°C. Unless specified, The Ambient temperature T<sub>a</sub>=25°C

Item	Symbol	min.	typ.	max.	Unit	Condition
Forward Current	I <sub>v</sub>	2.6	3.0	3.4	v	I <sub>f</sub> =40*2 mA
Power Dissipation	P <sub>d</sub>	–	–	136*2	mW	I <sub>f</sub> =40*2 mA
Luminous Uniformity	DL <sub>v</sub>	70			%	MIN/MAX*100%
Luminance	L <sub>v</sub>	50	63	–	cd/m <sup>2</sup>	I <sub>f</sub> =40*2 mA T=25°C
Dominant Wave Length	λ <sub>D</sub>	465	470	475	nm	
Lifetime	50000(brightness reduce half)				Hours	

**4. ACCEPT QUALITY LEVEL (AQL).**

4.1. AQL standard value: Critical defect =0, Major defect=0.65; Minor defect =2.5.

4.2. Inspection Plan: ANSI Z-1.4, Normal Inspection Level II, Single Sampling Plan.

**5. RELIABILITY TEST**

Test Item	Test Condition
High Temperature Storage	+90°C x 96h
Low temperature Storage	-40°C x 96h
High Temperature Operation	+70°C x 96h
Low Temperature Operation	-20°C x 96h
High Temperature, High Humidity	60°C x 90%RH x 4 Weeks
Thermal Shock	-20°C x 30min → 25°C x 10s → +70°C x 30min x 5 Cycles
Vibration Test	Frequency x Swing x Time 40Hz x 4mm x 4h
Drop Test	Height x Number of drop 1.0m x 6 drops