

**DISPLAY Elektronik GmbH**

# DATA SHEET

**BACKLIGHT**

**DE LP-501-W**

*Product Specification*

*Version: 2*

13.12.2021

# GENERAL SPECIFICATION

---

MODEL NO. :

**DE LP-501-W**

CUSTOMER P/N

<b>Version No.</b>	<b>Change Description</b>	<b>Date</b>
0	Original Version	25.08.2016
1	Add LED Lifetime	29.08.2016
2	Update brightness	13.12.2021

PREPARED BY: CC

DATE: 13.12.2021

APPROVED BY: MHO

DATE: 13.12.2021

**CONTENTS**

1. FEATURES ..... 2

2. EXTERNAL DIMENSION (UNIT: MM) ..... 2

3. ELECTRICAL/OPTICAL SPECIFICATIONS ..... 3

4. ACCEPT QUALITY LEVEL (AQL)..... 3

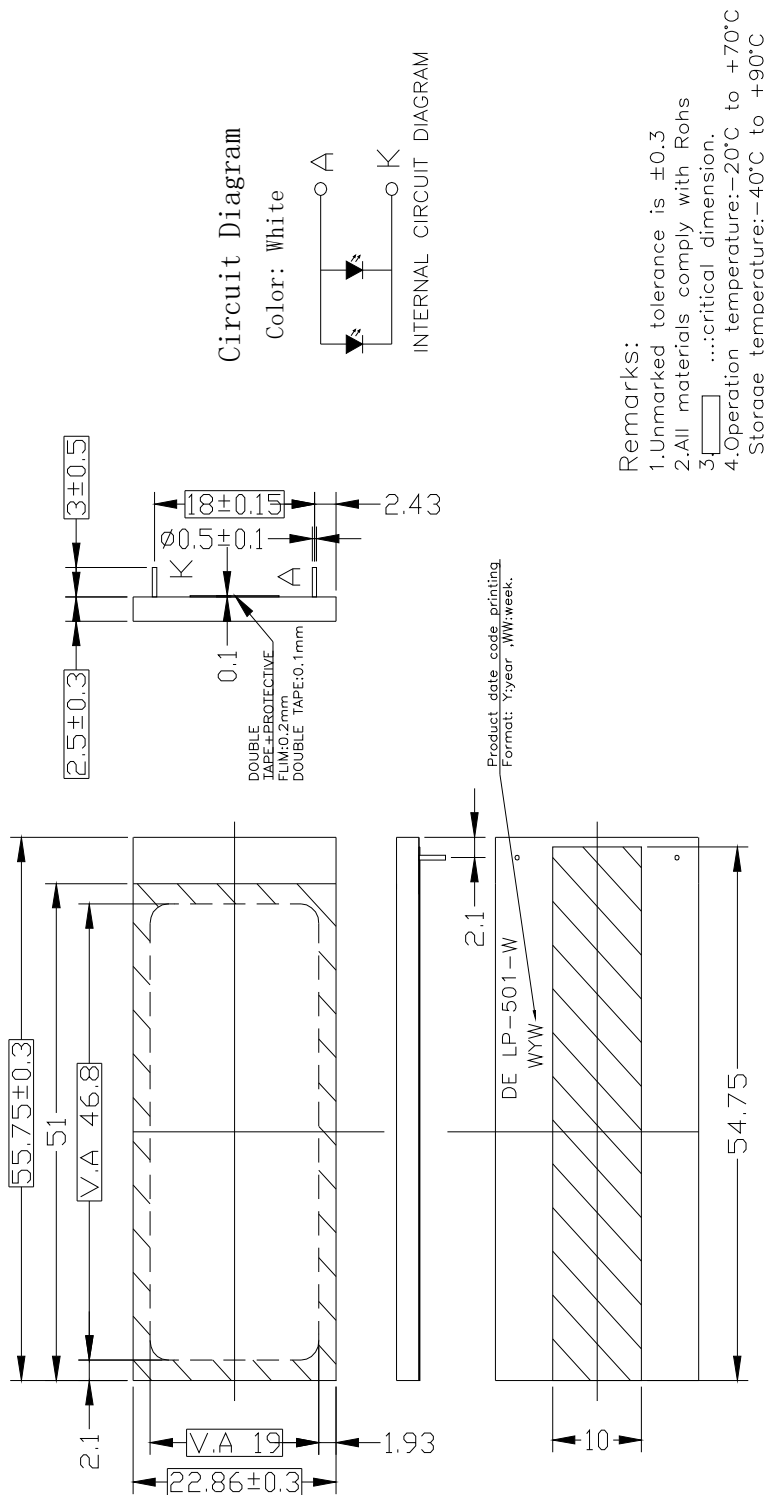
5. RELIABILITY TEST ..... 3

1. FEATURES

Backlight Color: White

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°C to +70°C  
 Storage temperature:-40°C to +90°C

**3. ELECTRICAL/OPTICAL SPECIFICATIONS**

## ELECTRICAL–OPTICAL CHARACTERISTICS

Ta=25°C. Unless specified, The Ambient temperature Ta=25°C

Item	Symbol	min.	typ.	max.	Unit	Condition
Forward Current	Iv	2.6	3	3.3	v	If= 30 mA
Power Dissipation	Pd	–	–	99	mW	If= 30 mA
Luminous Uniformity	DLv	70			%	MIN/MAX*100%
Luminance	Lv	1000	1500		cd/m <sup>2</sup>	If=30 mA T=25°C
Color Coordinate	x	0.270		0.340		
	γ	0.270		0.340		
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