

**DISPLAY Elektronik GmbH**

**DATA SHEET**

**BACKLIGHT**

**DE LP-501-R**

*Product Specification*

*Version: 0*

**25.08.2016**

# GENERAL SPECIFICATION

---

MODEL NO. :

**DE LP-501-R**

CUSTOMER P/N

Version No.	Change Description	Date
0	Original Version	25.08.2016

PREPARED BY: WH

DATE: 25.08.2016

APPROVED BY: MH

DATE: 25.08.2016

**CONTENTS**

**1. FEATURES .....2**

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

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

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

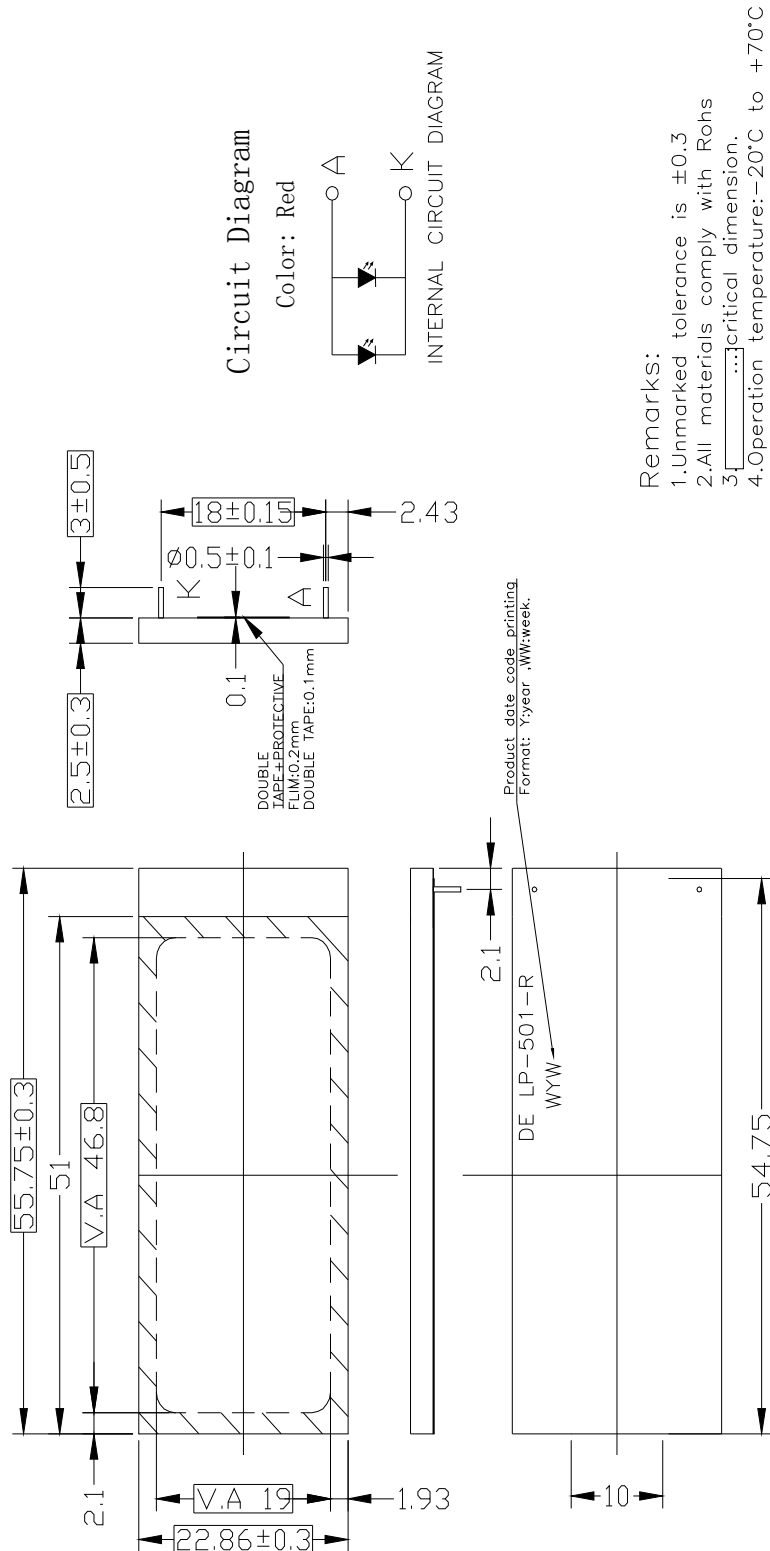
**5. RELIABILITY TEST.....3**

**1. FEATURES**

Backlight Color: Red

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

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

Item	Symbol	min.	typ.	max.	Unit	Condition
Forward Voltage	Vf	1.6	2.0	2.5	V	If= 30 mA
Power Dissipation	Pd			75	mW	If= 30 mA
Luminous Uniformity	ΔLv	70			%	MIN/MAX*100%
Luminance	Lv	160	350		cd/m <sup>2</sup>	If=30 mA T=25° C
Dominant Wave Length	λD	600	-	625	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