

**DISPLAY Elektronik GmbH**

**DATA SHEET**

**BACKLIGHT**

**DE LP-501-RGB**

*Product Specification*

*Version:1*

**29.08.2016**

# GENERAL SPECIFICATION

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MODEL NO. :

# DE LP-501-RGB

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

PREPARED BY: WH

DATE: 29.08.2016

APPROVED BY: MH

DATE: 29.08.2016

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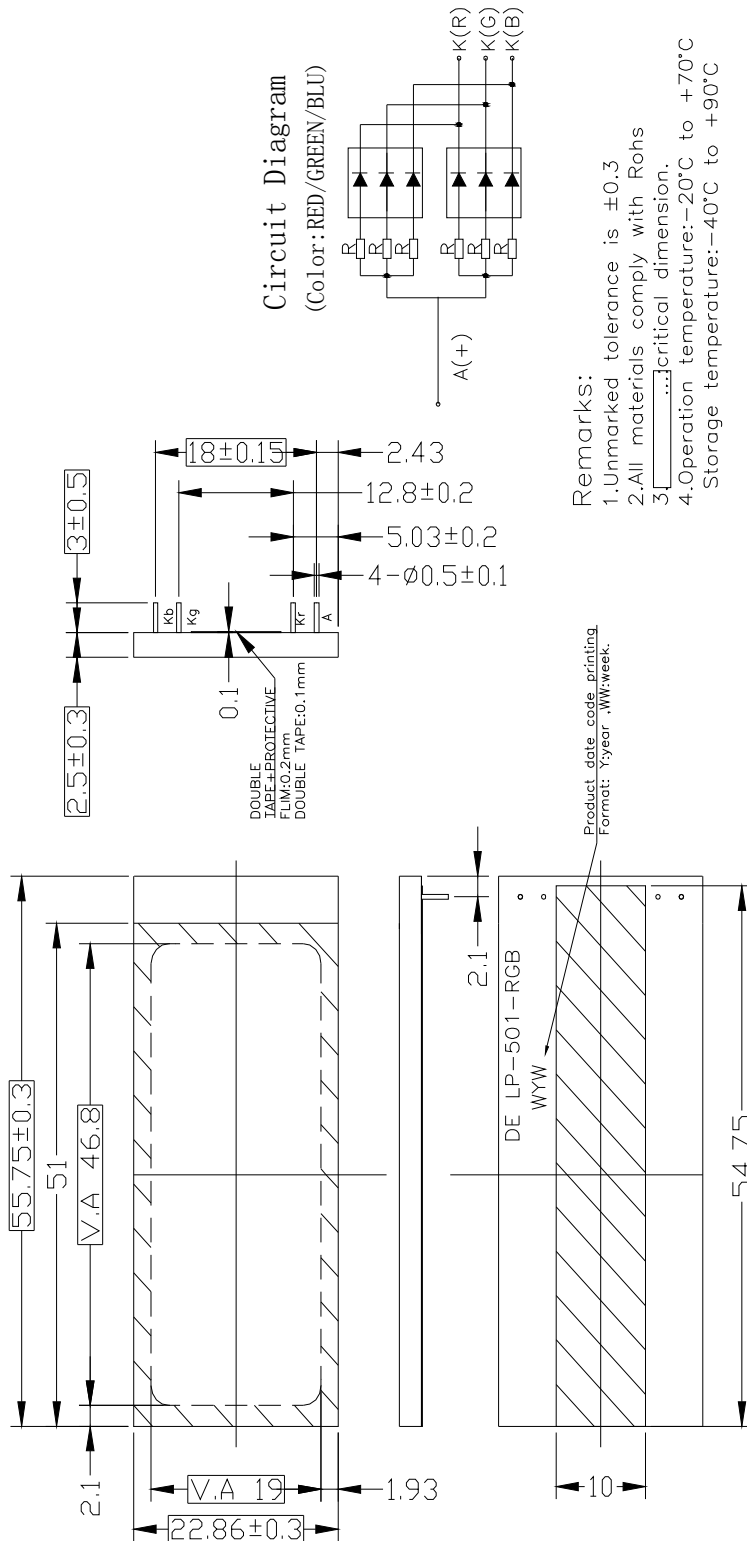
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1. FEATURES

Backlight Color: RGB

RoHS: Conformed

2. EXTERNAL DIMENSION (unit: mm)



**3. ELECTRICAL/OPTICAL SPECIFICATIONS**

## Electronics/Optical Specifications:

Item	Symbol	RED			GREEN			BLUE			WHITE			Unit	Condition
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
Forward Current	If		30	40		30	40		30	40		90	120	mA	Vf= 5 V
Dominant Wave Length	$\lambda$ D	620	630	640	515	525	535	465	470	475	—	—	—	nm	
Color Chromaticity	X	—	—	—	—	—	—	—	—	—	0.260		0.330		
	Y	—	—	—	—	—	—	—	—	—	0.260		0.330		
Uniformity	Avg	65			65			65			65			%	
Luminance	Lv	150	350		350	650		60	200		400	650		cd/m <sup>2</sup>	
Reverse Current (Per LED)	Ir			10			10			10			10	$\mu$ A	Vr= 3.0 V
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