

DISPLAY Elektronik GmbH

DATA SHEET

BACKLIGHT

DE LP-509-Y

Product Specification

Version: 1

17.11.2016

GENERAL SPECIFICATION

MODEL NO. :

DE LP-509-Y

CUSTOMER P/N

Version No.	Change Description	Date
0	Original Version	20.10.2016
1	Change Brightness	17.11.2016

PREPARED BY: ZX

DATE: 17.11.2016

APPROVED BY: MH

DATE: 17.11.2016

CONTENTS

1. FEATURES2

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

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

4. ACCEPT QUALITY LEVEL (AQL). FEHLER! TEXTMARKE NICHT DEFINIERT.

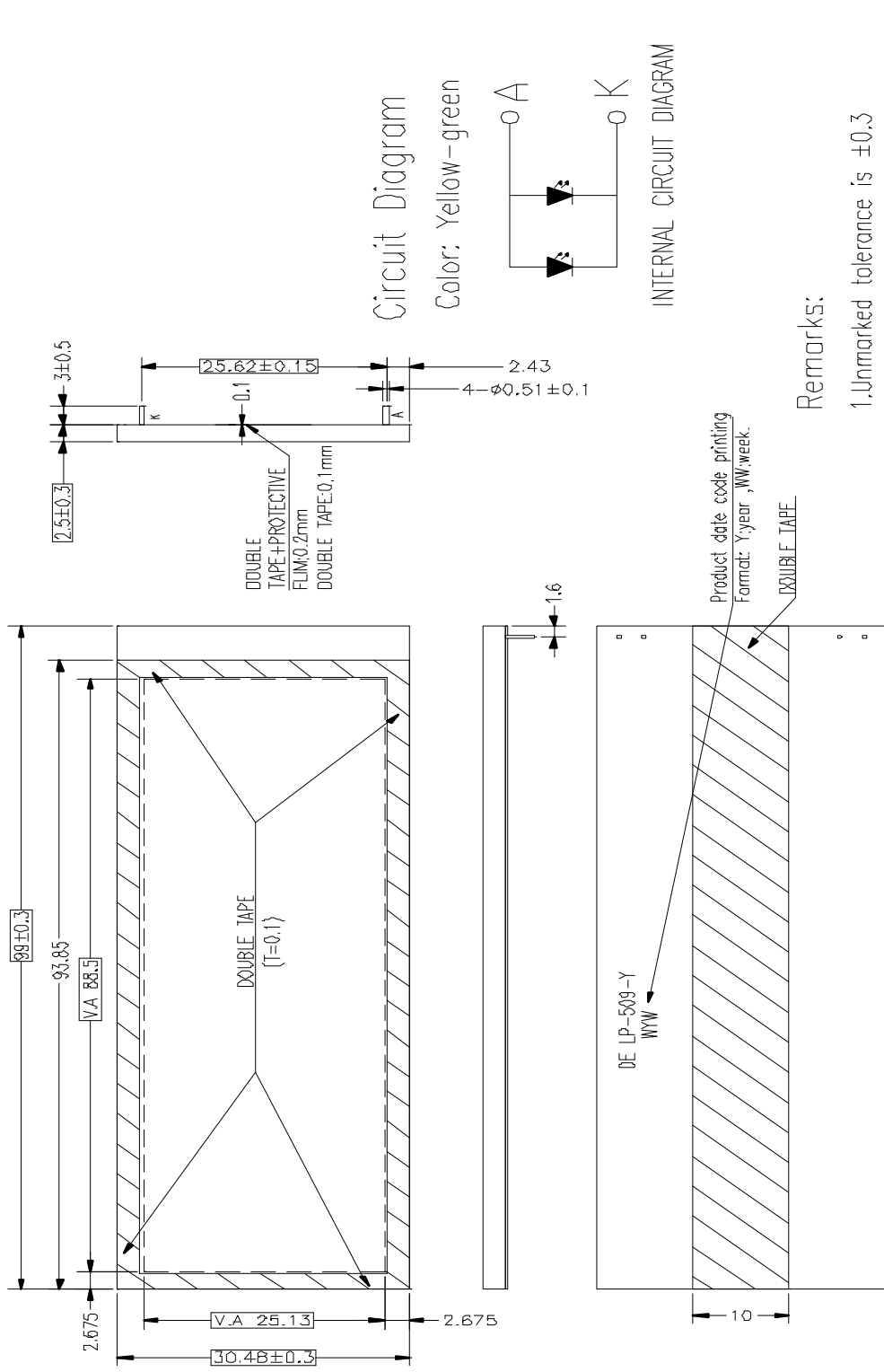
5. RELIABILITY TEST..... FEHLER! TEXTMARKE NICHT DEFINIERT.

1. FEATURES

Backlight Color: Yellow-Green

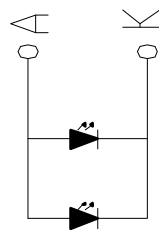
RoHS: Conformed

2. EXTERNAL DIMENSION (unit: mm)



Circuit Diagram

Color: Yellow-green



INTERNAL CIRCUIT DIAGRAM

Remarks:

1. Unmarked tolerance is ± 0.3
2. All materials comply with RoHS
3. ...critical dimension.
4. Operation temperature: -20°C to $+70^{\circ}\text{C}$
Storage temperature: -40°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	1.8	2.1	2.5	V	If= 20*2 mA
Power Dissipation	Pd			100	mW	If= 20*2 mA
Luminous Uniformity	Δ Lv	70			%	MIN/MAX*100%
Luminance	Lv	10	30		cd/m ²	If=20*2 mA T=25°C
Dominant Wave Length	λD	565	570	575	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