

DISPLAY Elektronik GmbH

DATA SHEET

BACKLIGHT

DE LP-511-B

Product Specification

Version: 2

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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 | 2.9 | 3.2 | 3.5 | V | If= 20 mA |
| Power Dissipation | Pd | | | 70 | mW | If= 20 mA |
| Luminous Uniformity | ΔLv | 70 | | | % | MIN/MAX*100% |
| Luminance | Lv | 250 | 500 | | cd/m ² | If= 20 mA T=25°C |
| Dominant Wave Length | λD | 460 | - | 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 |