



Data Sheet

Customer: _____

Part No: _____

CLT-2531AUB-11

Sample No: _____

Description: _____

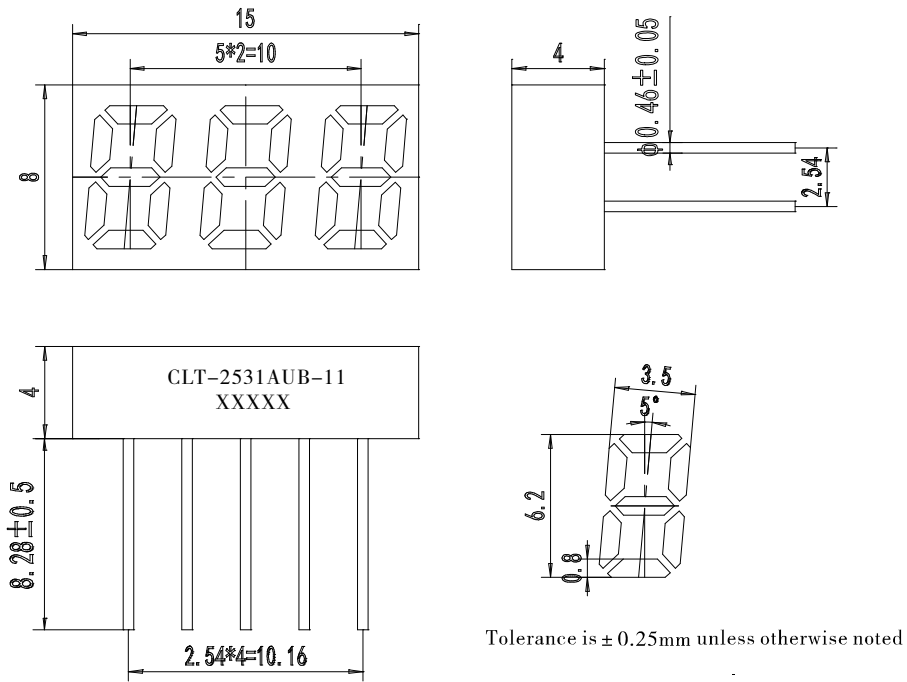
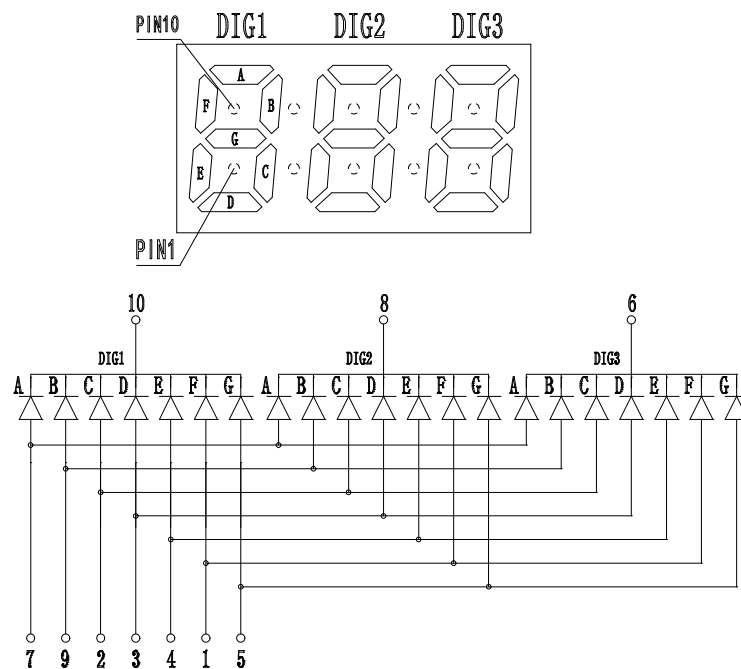
0.25 inch 3 Digit Blue Color

Item No: _____

| Customer | | | |
|----------|------------|----------|------|
| Check | Inspection | Approval | Date |
| | | | |

Descriptions

1. Emitting color: Blue
2. Lens color: White Diffused
3. Surface Ink color : Black
4. Dice material: InGaN/GaN

Outline drawing

Internal Circuit Diagram (C.C.)


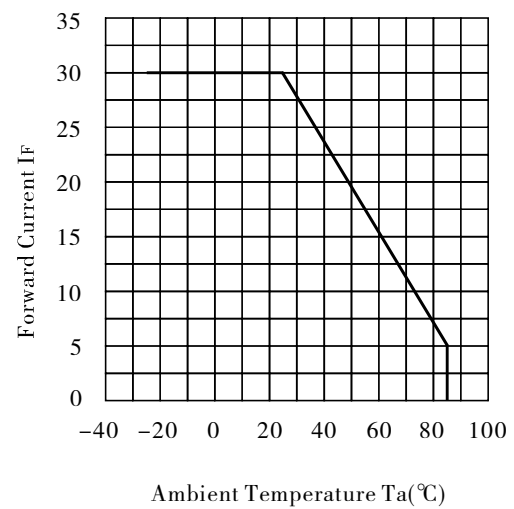
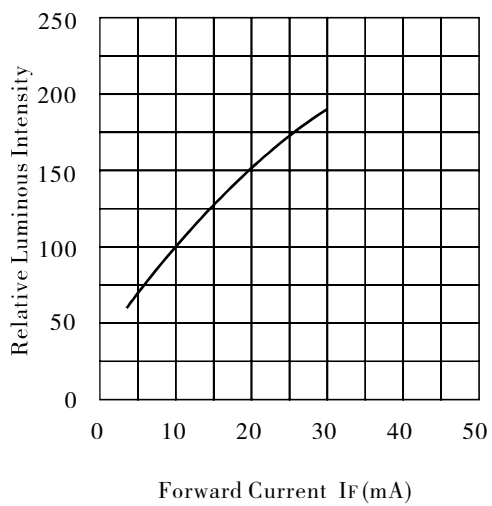
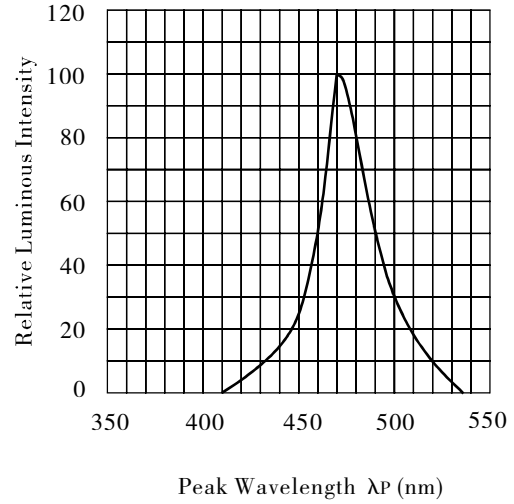
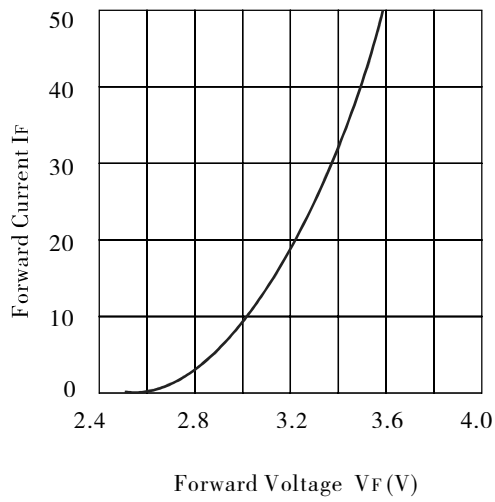
Electrical optical characteristics (Ta=25°C)

| Parameter | Symbol | Super Blue | | | Unit | Test Condition |
|--------------------------|-----------------|------------|------|-----|---------|----------------|
| | | Min | Typ | Max | | |
| Forward Voltage | V_F | --- | 3.2 | 3.6 | V | IF=20mA |
| Luminous Intensity | I_V | 7.0 | 13.7 | --- | mcd | IF=10mA |
| Peak Wavelength | λ_P | --- | 468 | --- | nm | IF=20mA |
| Dominant Wavelength | λ_d | --- | 470 | --- | nm | IF=20mA |
| Spectral Line half-width | $\Delta\lambda$ | --- | 30 | --- | nm | IF=20mA |
| Reverse Leakage Current | I_R | --- | --- | 50 | μA | VR=5V |

Absolute Maximum Parameters(Ta=25°C)

| Parameter | Symbol | Condition | Rating | Unit |
|-----------------------------|--------|----------------|------------|-------|
| Power Dissipation | P_D | --- | 120 | mW |
| Reverse Voltage | V_R | --- | 5 | V |
| Forward Average Current | I_F | --- | 30 | mA |
| Temperature Coefficient | I/C | --- | 0.4 | mA/°C |
| Pulse Current | IFP | Duty=1/10,1kHz | 100 | mA |
| Operating Temperature Range | Topr | --- | -25 ~ +85 | °C |
| Storage Temperature Range | Tstg | --- | -30 ~ +100 | °C |
| Soldering Condition | Tsd | --- | 260°C/5sec | °C |

Typical Electro/Optical Characteristic Curves(Ta=25°C)



Reliability Test Conditions

| Test Item | Test Condition | Result | Judgment Criteria |
|---|--|--------|--|
| Consecutive operating life test | IF=20mA, T=25℃, t=168h | 0/10 | Forward Voltage VF(V)= Upper Limit × 1.2 Reverse Leakage Current IR(μA)=Upper Limit × 2.0 Luminous Intensity IV (mcd)=Lower Limit × 0.7 |
| High temperature storage life test | T=100℃, t=168h | 0/10 | |
| Low temperature storage life test | T=-25℃, t=168h | 0/10 | |
| High temperature humidity storage life test | T=85 ± 2℃, RH=85% ± 3, t=168h | 0/10 | |
| Temperature cycle test | -25℃~25℃~100℃ 30min 5min 30min 10cycles | 0/10 | |
| Thermal shock test | 100℃ 0℃ 5min 5min 20cycles | 0/10 | |
| Soldering heat test | T=260 ± 5℃, t=10s ± 1s | 0/10 | |
| Solderability test | T=235 ± 5℃, t=5s ± 0.5s | 0/10 | Steeped Part ≥ 95% |
| Fall test | h=100cm, 50times | 0/10 | Surface Appearance Photoelectric Properties Intact |
| Terminal strength test | W=9.8N, t=30 ± 5s | 0/10 | |
| Lead bending test | W=4.9N, 2times | 0/10 | |