

光鋳科技股份有限公司
Epileds Technologies, Inc.
 Product specification of 13 x11 mil green chip

1. Scope:

This specification applies to InGaN/GaN 13 x 11mil green chip, EL-G1311A-A1 ◦

2. Materials :

2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

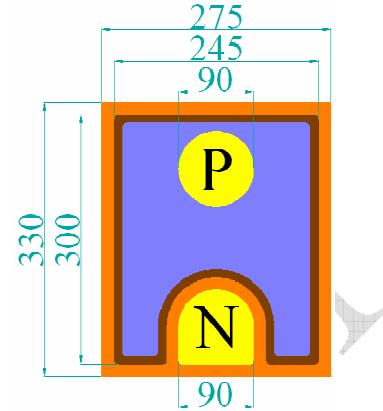
3. Dimensions :

3.1 Chip size : 330μm x 275μm ◦

3.2 P-pad : φ90μm, thickness 1.2μm ◦

3.3 N-pad : φ90μm, thickness 1.2μm ◦

3.4 Chip thickness : 90μm±10μm ◦



4. Electro-optical characteristics and specification: (Tc=25°C)

4.1 Electro-optical characteristics

| Test parameter | Condition | Min | Typ | Max | Unit |
|--|-----------|------|-----|-----|------|
| Dominant wavelength(Wd) | 20mA | 500 | - | 540 | nm |
| Luminous intensity(Iv) | 20mA | 260 | - | 770 | mcd |
| Forward voltage(Vf4) | 1uA | 1.7 | - | 2.5 | V |
| Forward voltage(Vf1) | 20mA | 2.8 | - | 3.8 | V |
| Reverse current (Ir) | -8V | 0 | - | 0.5 | uA |
| Electrostatic discharge characteristic (ESD) | HBM | 1000 | - | - | V |

4.2 Electro-optical specification(Bin table) :

| Wd | | | | Iv | | Vf1 (V) | Vf4 (V) | Ir (uA) |
|-----|-----------|-----|-----------|-----|---------|------------|------------|------------|
| Bin | nm | Bin | nm | Bin | mcd | | | |
| GA | 500~502.5 | GI | 520~522.5 | D0 | 260~285 | 2.8~3.4 | 1.8~2.5 | 0~0.1 |
| GB | 502.5~505 | GJ | 522.5~525 | D1 | 285~310 | | | |
| GC | 505~507.5 | GK | 525~527.5 | D2 | 310~340 | | | |
| GD | 507.5~510 | GL | 527.5~530 | D3 | 340~370 | | | |
| GE | 510~512.5 | GM | 530~532.5 | D4 | 370~410 | | | |
| GF | 512.5~515 | GN | 532.5~535 | D5 | 410~440 | | | |
| GG | 515~517.5 | GO | 535~537.5 | 20 | 440~530 | | | |
| GH | 517.5~520 | GP | 537.5~540 | 21 | 530~640 | | | |
| | | | | 22 | 640~770 | | | |

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* The detail technical and reliability datasheet are also available for your reference, please be free to contact us.