

PRELIMINARY SPEC

Part Number: KPTK-2012ZGC

Green



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

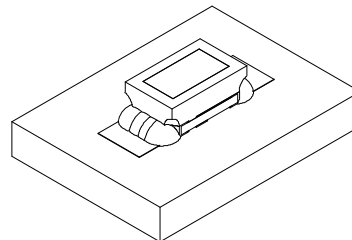
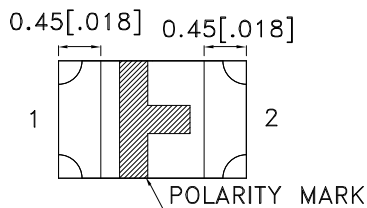
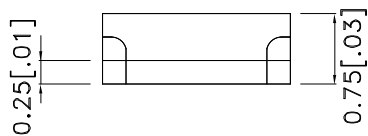
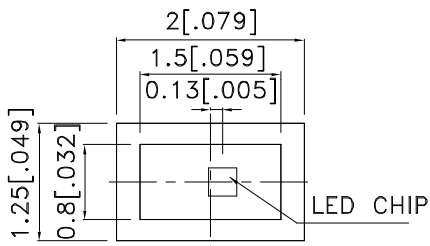
Features

- 2.0mmx1.25mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

The Green source color devices are made with AlInGaN on Sapphire Light Emitting Diode.
Static electricity and surge damage the LEDs.
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|--------------|-----------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| KPTK-2012ZGC | Green (AlInGaN) | WATER CLEAR | 110 | 300 | 100° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Green | 515 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | Green | 525 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green | 30 | | nm | I _F =20mA |
| C | Capacitance | Green | 45 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Green | 3.3 | 4.1 | V | I _F =20mA |
| I _R | Reverse Current | Green | | 10 | uA | V _R =5V |

Notes:

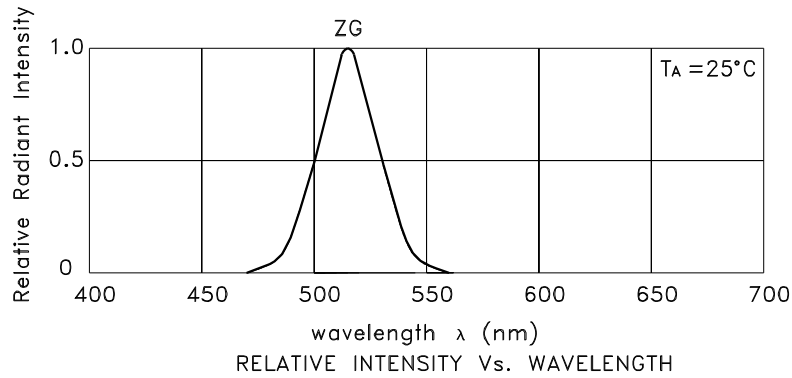
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Green | Units |
|--------------------------|----------------|-------|
| Power dissipation | 102.5 | mW |
| DC Forward Current | 25 | mA |
| Peak Forward Current [1] | 150 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature | -40°C To +85°C | |

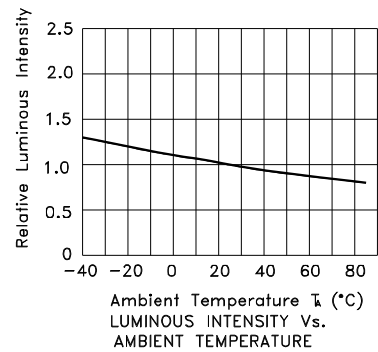
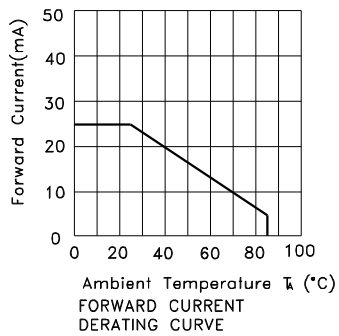
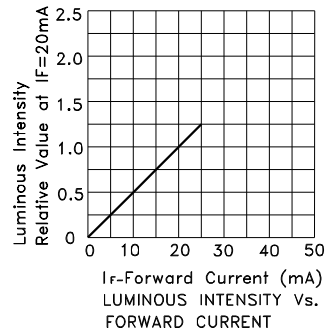
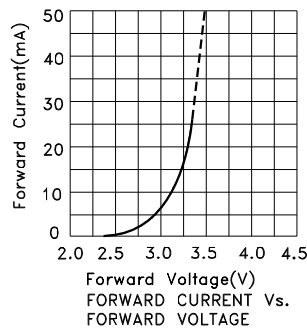
Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



Green

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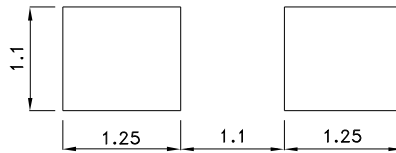
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Tape Specifications (Units : mm)

