

PRELIMINARY SPEC

P/N: KPA-1606QWF-D

WHITE



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- 1.6mmx0.6mm RIGHT ANGLE SMT LED, 1.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE :2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

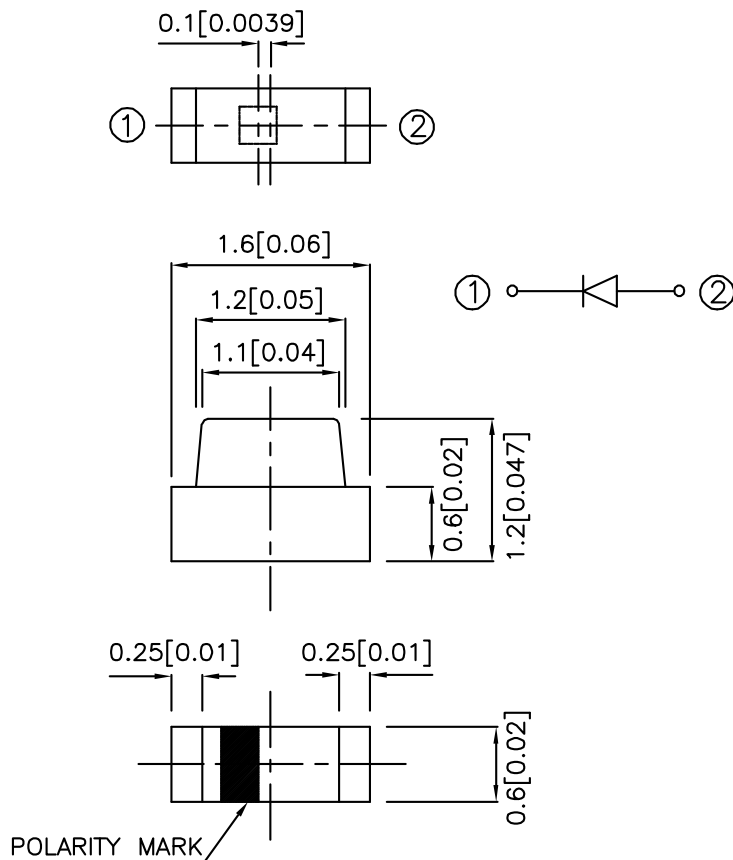
The source color devices are made with GaN on Sapphire Light Emitting Diode.

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.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle[1]
			Min.	Typ.	2θ1/2
KPA-1606QWF-D	WHITE (GaN)	YELLOW FLUORESCENT	110	350	110°

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
V _F [1]	Forward Voltage	White	3.5	4.0	V	I _F =20mA
I _R	Reverse Current	White		10	uA	V _R = 5V
X [2]	Chromaticity Coordinates	White	0.33			
Y [2]			0.34			
C	Capacitance	White	100		pF	V _F =0V;f=1MHz

Notes:

1. Forward Voltage: +/-0.1V.
2. Chromaticity Coordinates X, Y: +/-0.01.

Absolute Maximum Ratings at TA=25°C

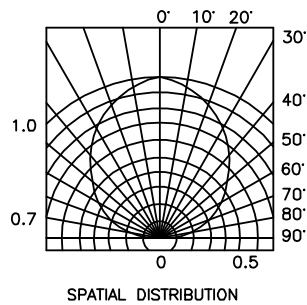
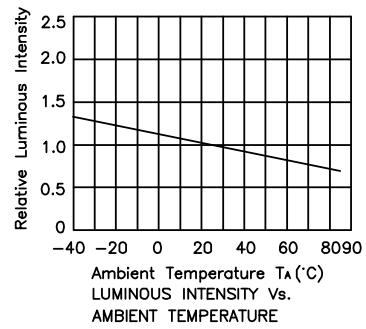
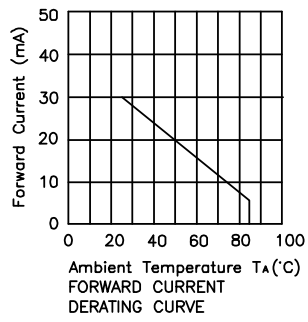
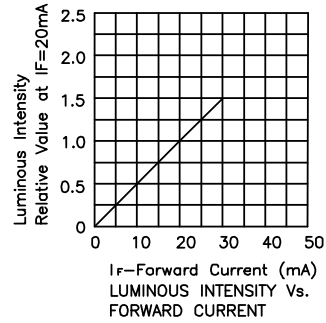
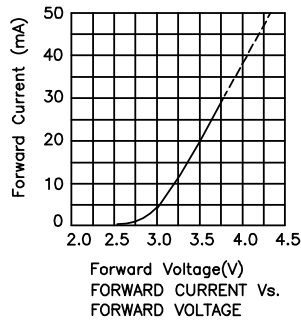
Parameter	White	Units
Power dissipation	105	mW
Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

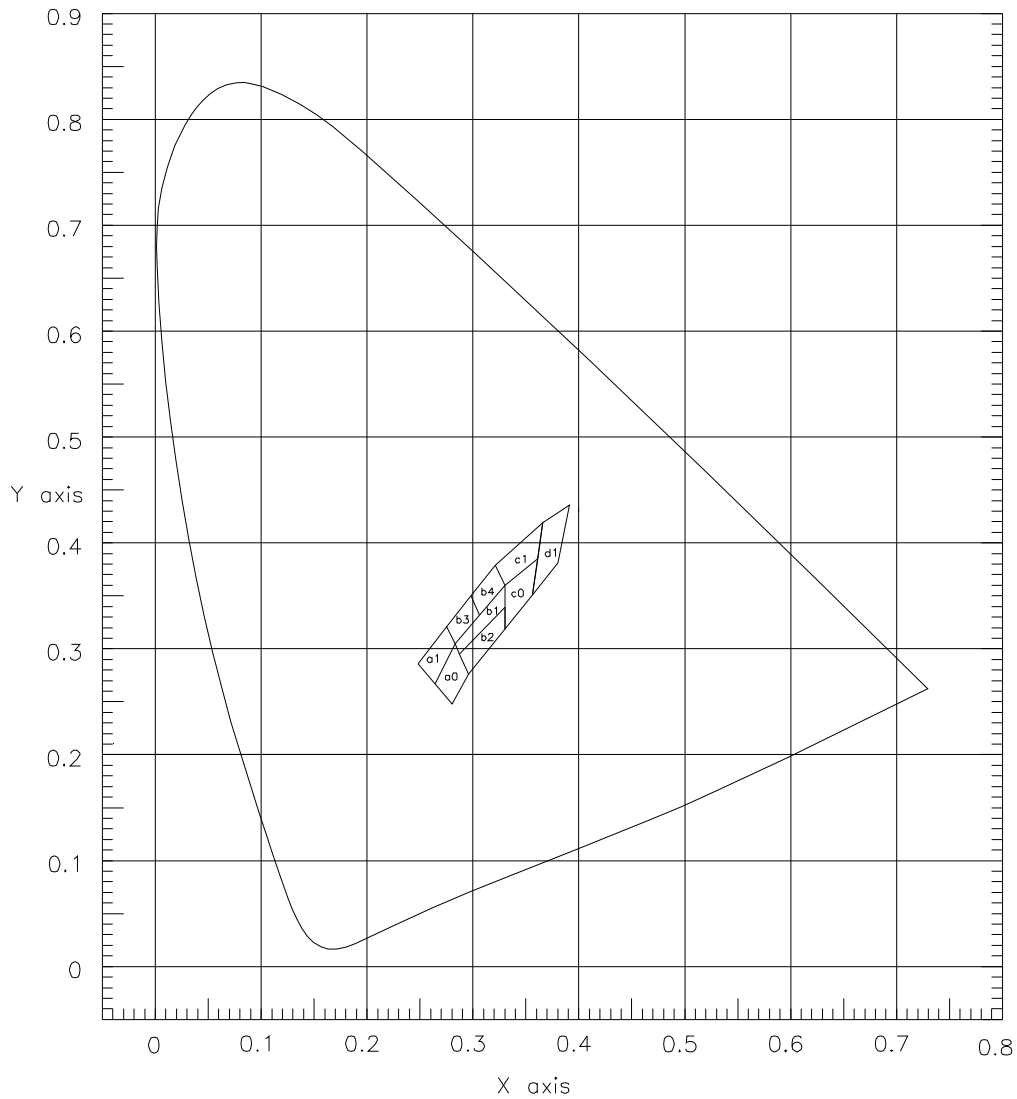
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

White

KPA-1606QWF-D



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a1	
X	0.248 0.275 0.283 0.264
Y	0.286 0.321 0.305 0.267
b1	
X	0.283 0.330 0.330 0.287
Y	0.305 0.360 0.339 0.295
c1	
X	0.321 0.366 0.361 0.330
Y	0.379 0.419 0.385 0.360

a0	
X	0.264 0.283 0.296 0.280
Y	0.267 0.305 0.276 0.248
b2	
X	0.287 0.330 0.330 0.296
Y	0.295 0.339 0.318 0.276
c0	
X	0.330 0.361 0.356 0.330
Y	0.360 0.385 0.351 0.318

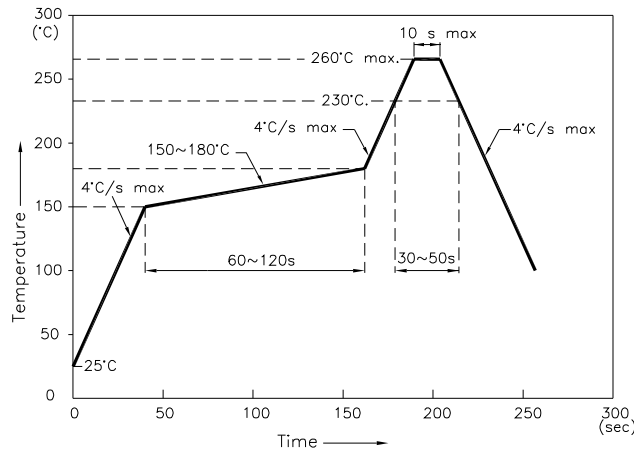
b3	
X	0.275 0.298 0.306 0.283
Y	0.321 0.350 0.332 0.305
b4	
X	0.298 0.321 0.330 0.306
Y	0.350 0.379 0.360 0.332
d1	
X	0.366 0.391 0.380 0.356
Y	0.419 0.436 0.381 0.351

Ta=25°, IF=20mA

Measurement Uncertainty of the Color Coordinates: +/-0.01

KPA-1606QWF-D

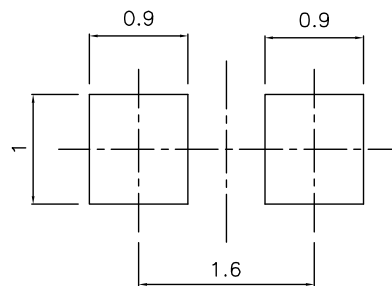
Reflow Soldering Profile For Lead-free SMT Process.



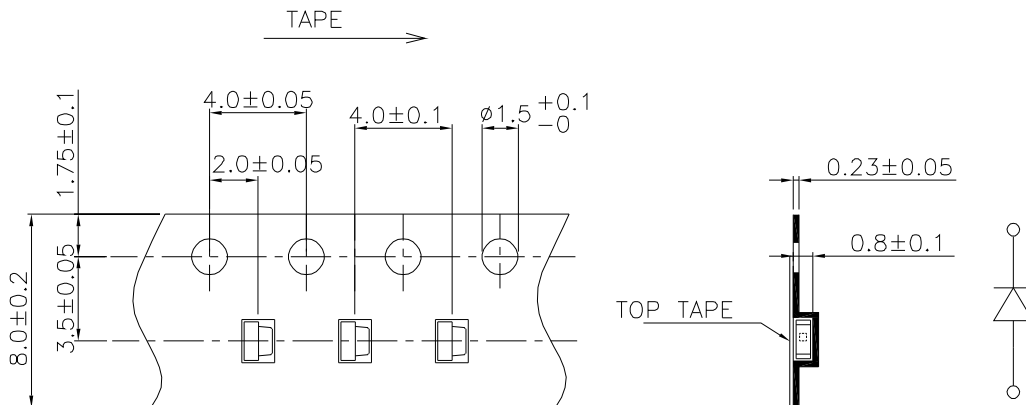
NOTES:

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)



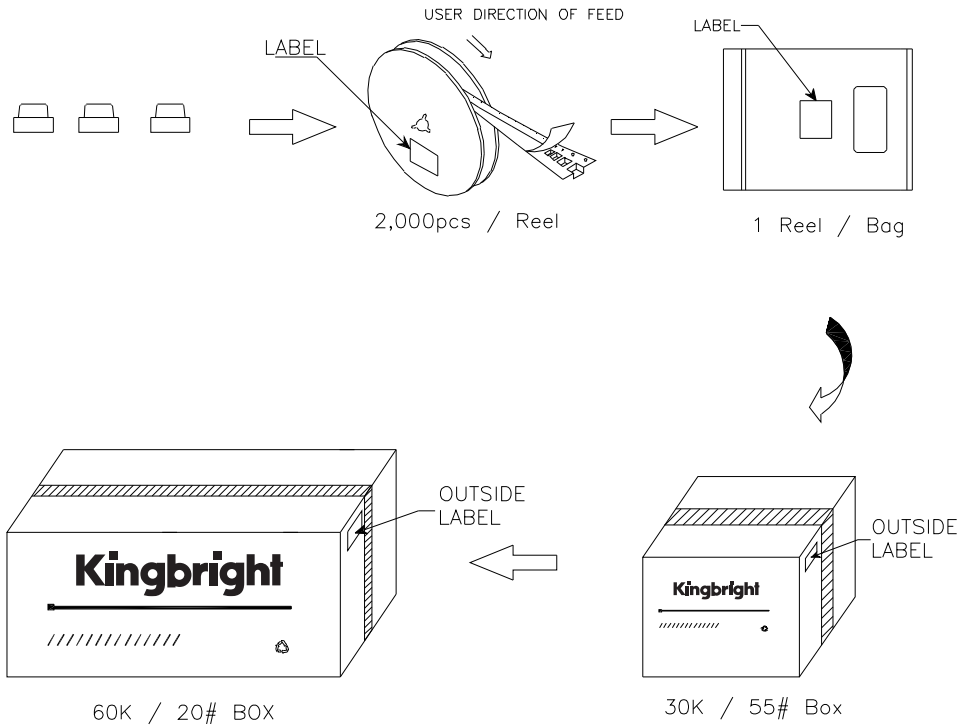
Tape Specifications (Units : mm)




Note: Tolerance is ± 0.25 unless otherwise noted.

PACKING & LABEL SPECIFICATIONS

KPA-1606QWF-D



<h1>Kingbright</h1>	
P/NO: KPA-1606XXX	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
	
MADE IN CHINA	RoHS Compliant