

Order code	Manufacturer code	Description
56-0272	n/a	KPT-1608QWF-E LED SMD WHITE (RC)
56-0272	n/a	KPT-1608QWF-E LED SMD WHITE (RC)
56-0270	n/a	KPT-1608QWF-E REEL2K LED SMD WHITE (RC)
56-0270	n/a	KPT-1608QWF-E REEL2K LED SMD WHITE (RC)

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The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 04/07/2003



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

P/N: KPT-1608QWF-E

WHITE

PRELIMINARY SPEC

Features

- 1.6mmX0.8mm SMT LED, 0.75mm 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

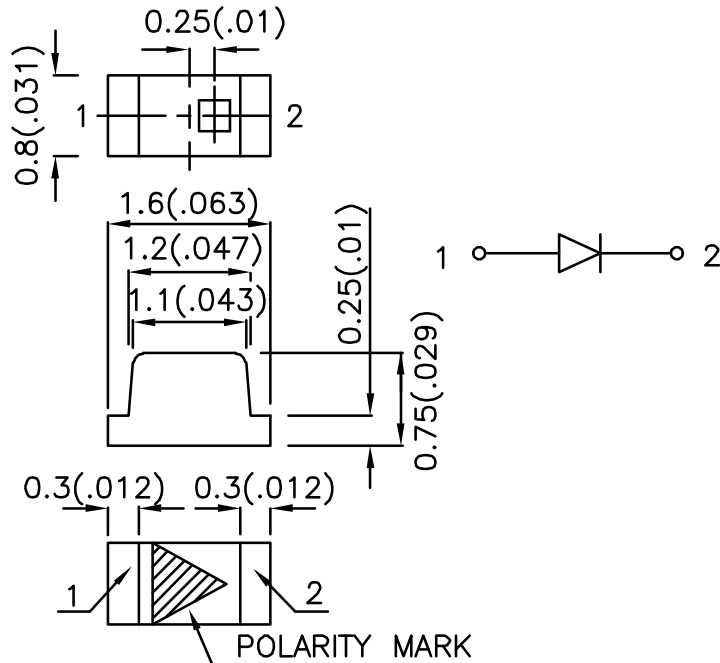
The source color devices are made with AlInGaN on Sapphire Light Emitting Diode.

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.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
KPT-1608QWF-E	WHITE (AlInGaN)	YELLOW FLUORESCENT	110	300	120°

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	3.3	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	105		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

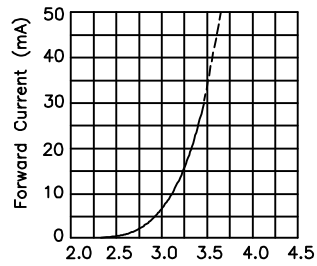
Parameter	White	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

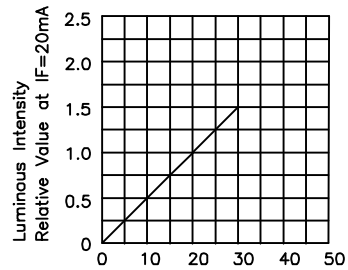
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

White

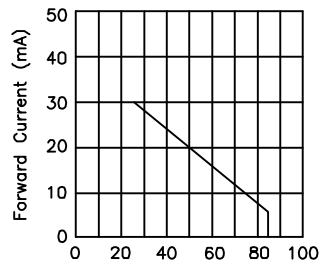
KPT-1608QWF-E



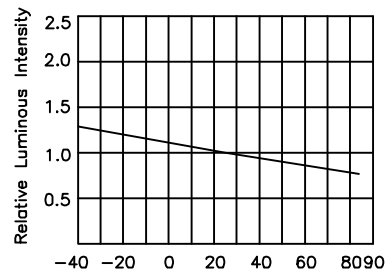
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



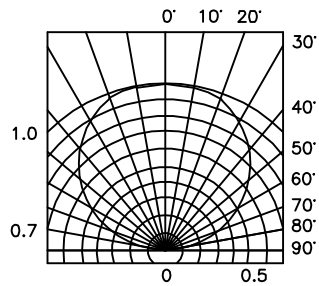
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature T_A (°C)
FORWARD CURRENT
DERATING CURVE

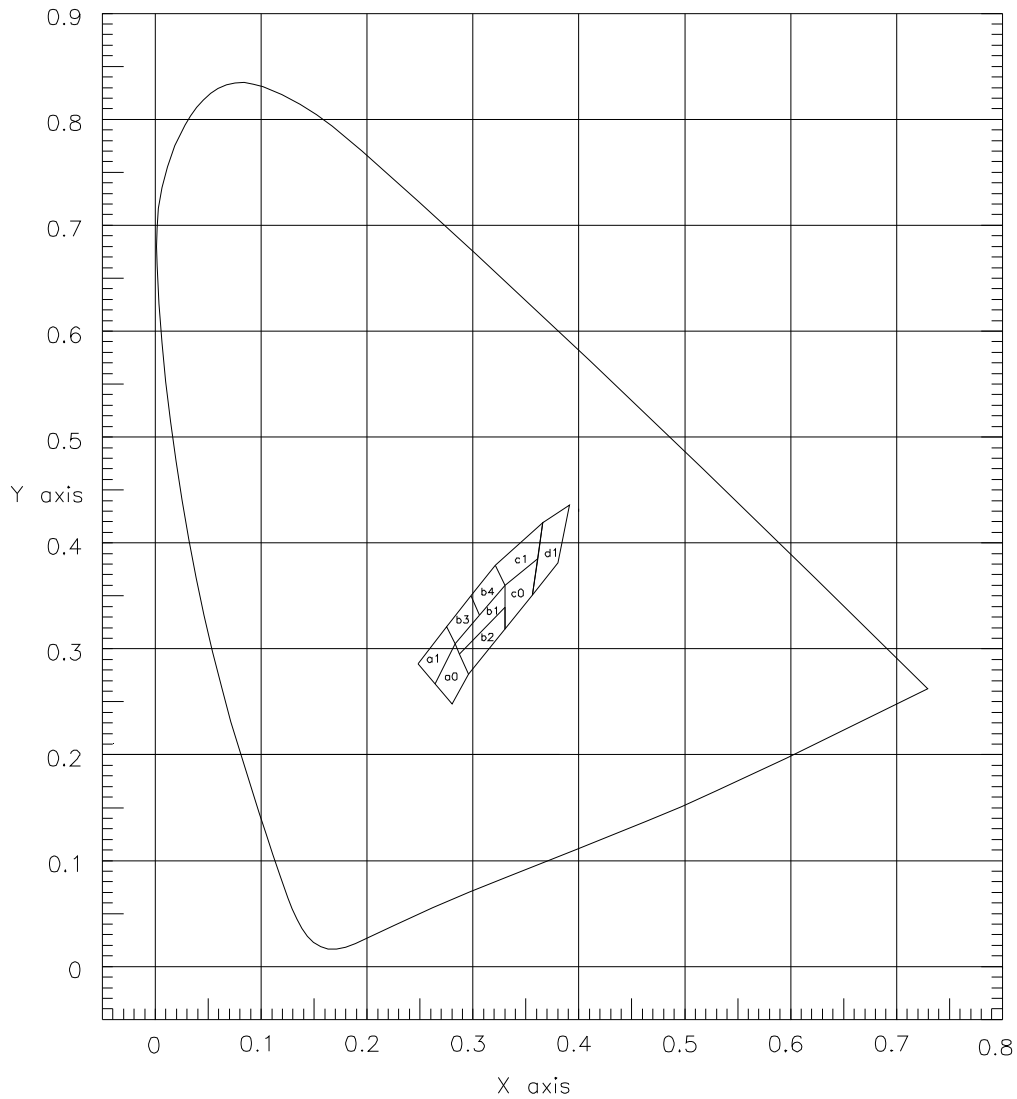


Ambient Temperature T_A (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

KPT-1608QWF-E



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

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

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

Ta=25°, IF=20mA

Measurement Uncertainty of the Color Coordinates: +/-0.01