



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: APTF1616SEJ3ZGGVBDC

Hyper Red
Green
Blue

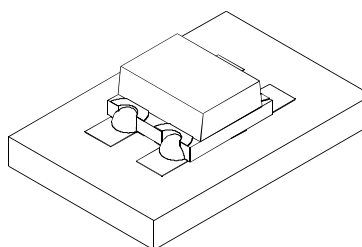
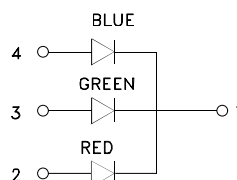
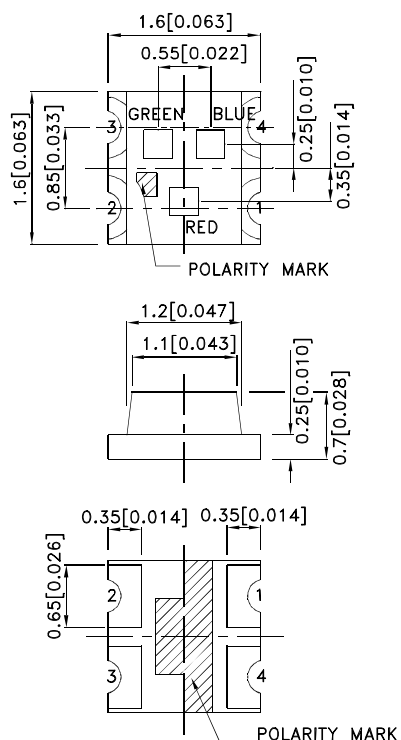
Features

- 1.6mmX1.6mm SMT LED, 0.7mm thickness.
- Low power consumption.
- Can produce any color in visible spectrum, including white light.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Descriptions

- The Hyper Red device is based on light emitting diode chip made from AlGaInP.
- The Green source color devices are made with InGaN Light Emitting Diode.
- The Blue source color devices are made with InGaN Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior 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
APTF1616SEJ3ZGGVBDC	Hyper Red (AlGaInP)	Water Clear	200	360	120°
	Green (InGaN)		500	750	
	Blue (InGaN)		80	140	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red Green Blue	640 520 465		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red Green Blue	625 525 470		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Green Blue	25 35 22		nm	IF=20mA
C	Capacitance	Hyper Red Green Blue	27 100 100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red Green Blue	2.2 3.2 3.3	2.8 4 4	V	IF=20mA
IR	Reverse Current	Hyper Red Green Blue		10 50 50	uA	VR=5V

Notes:

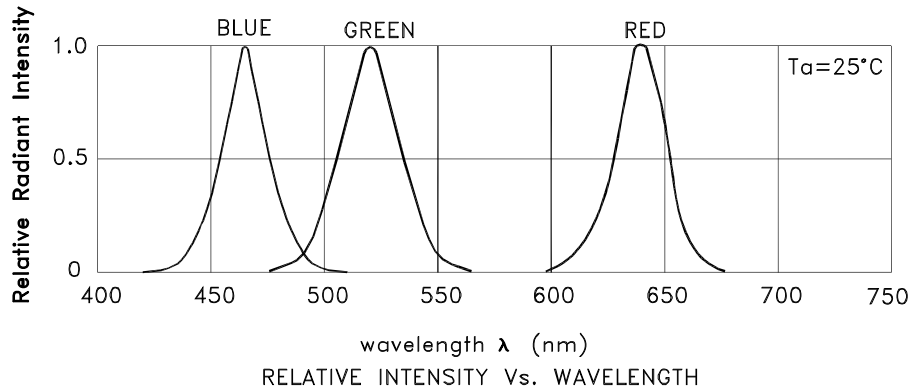
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3.Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

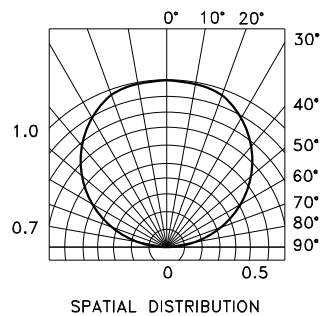
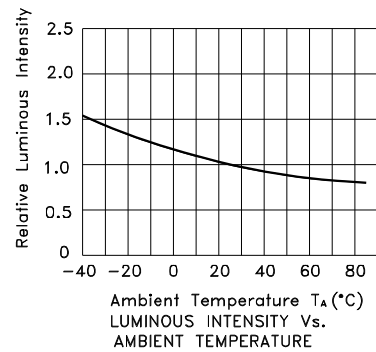
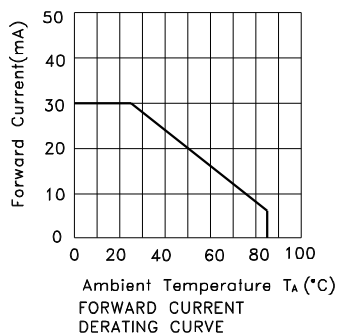
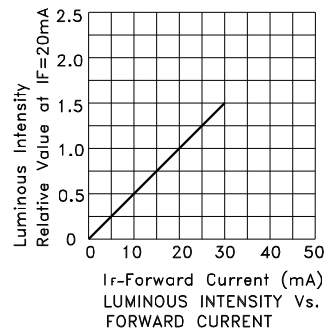
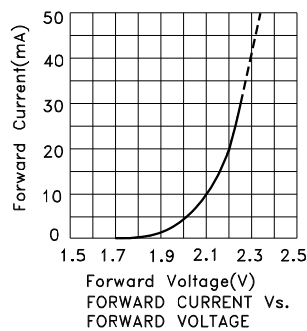
Parameter	Hyper Red	Green	Blue	Units
Power dissipation	84	120	120	mW
DC Forward Current	30	30	30	mA
Peak Forward Current [1]	150	100	100	mA
Reverse Voltage	5			V
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

Notes:

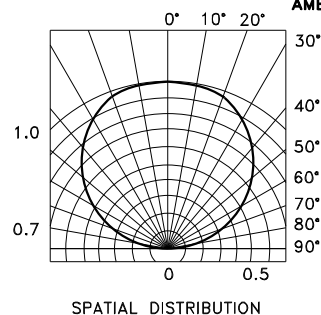
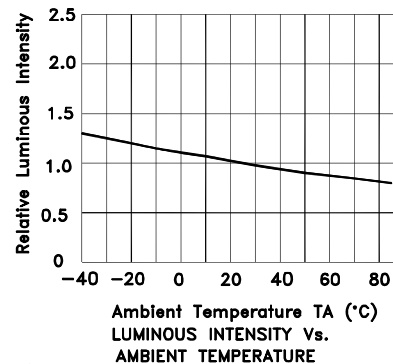
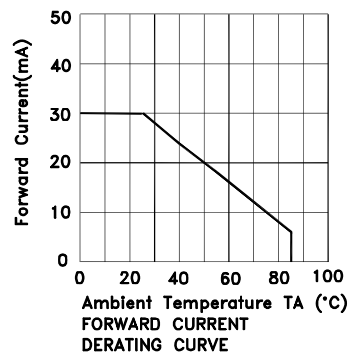
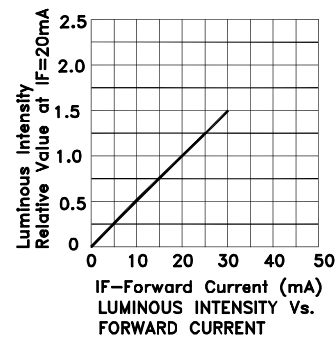
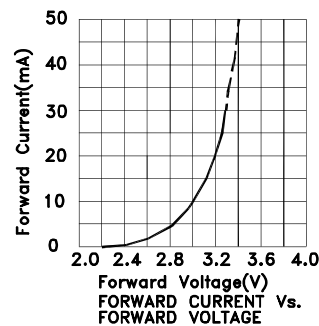
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



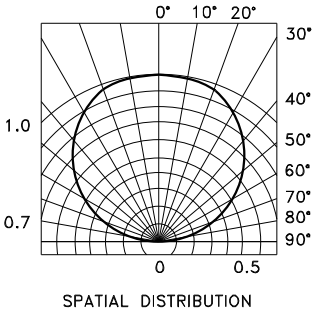
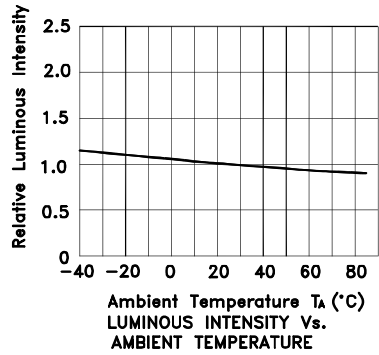
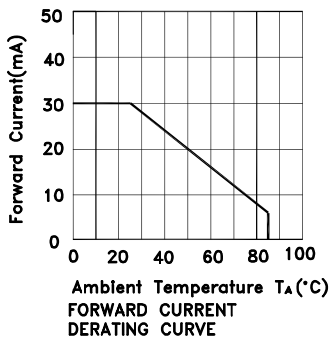
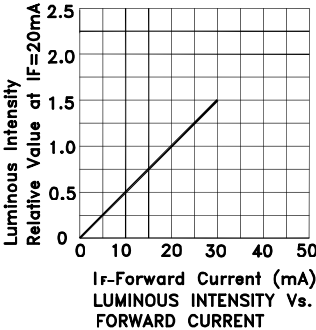
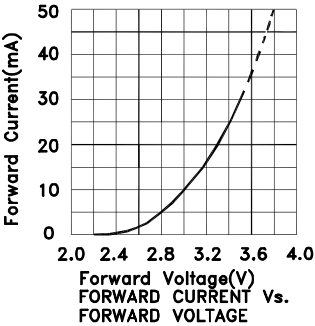
APTF1616SEJ3ZGGVBDC
Hyper Red



Green

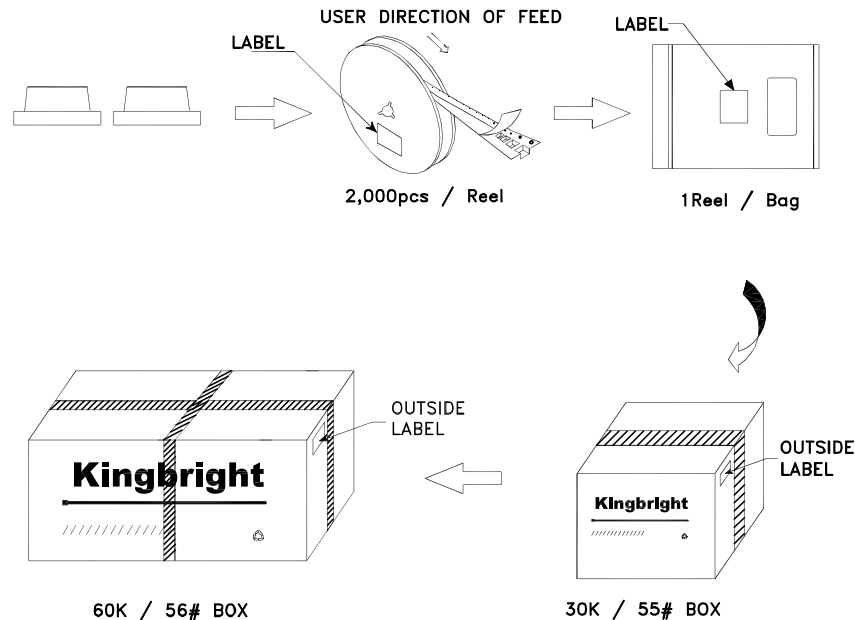


Blue



PACKING & LABEL SPECIFICATIONS

APTF1616SEJ3ZGGVBDC



Kingbright	
P/NO: APTF1616xxx	
QTY: 2,000 pcs	Q.C. Q C XX-XX XXXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
	
RoHS Compliant	

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- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
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- Работу по проектам и поставку образцов.
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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
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