



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

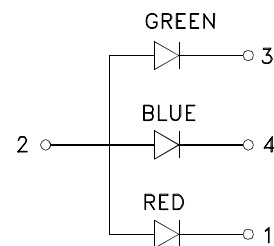
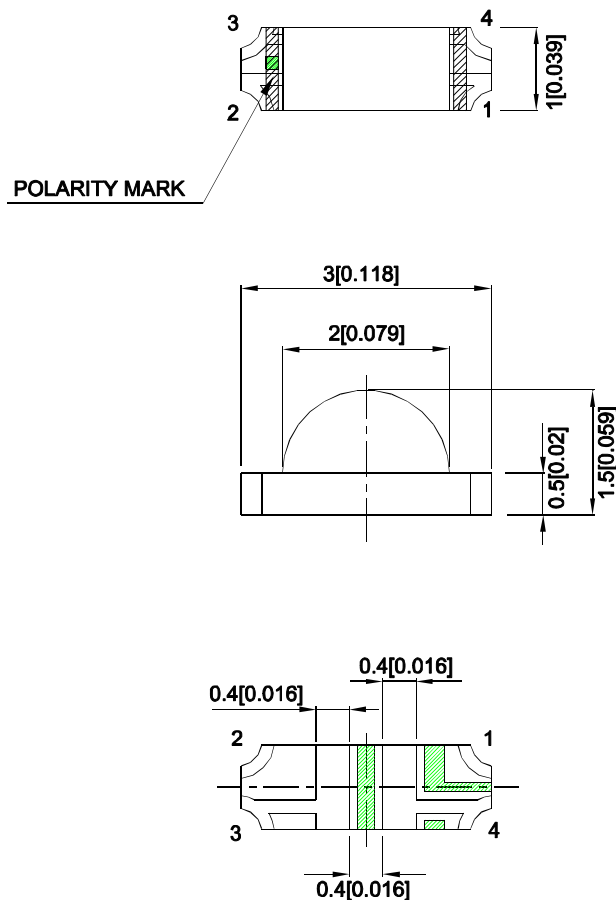
Part Number: APFA3010SEEZGKBKC

Hyper Red  
Green  
Blue

### Features

- 3.0mmx1.5mmx1.0mm right angle SMD LED, 1.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

### 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.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APFA3010SEEZGKBKC	Hyper Red (AlGaInP)	Water Clear	80	140	120°
	Green (InGaN)		300	500	
	Blue (InGaN)		40	70	

### 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	Emitting Color	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red Green Blue	630 515 460		nm	If=20mA
λD [1]	Dominant Wavelength	Hyper Red Green Blue	621 525 465		nm	If=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Green Blue	20 30 25		nm	If=20mA
C	Capacitance	Hyper Red Green Blue	25 45 100		pF	Vf=0V;f=1MHz
Vf [2]	Forward Voltage	Hyper Red Green Blue	2 3.3 3.3	2.5 4.1 4	V	If=20mA
IR	Reverse Current	Hyper Red Green Blue		10 50 50	uA	VR=5V

### Notes:

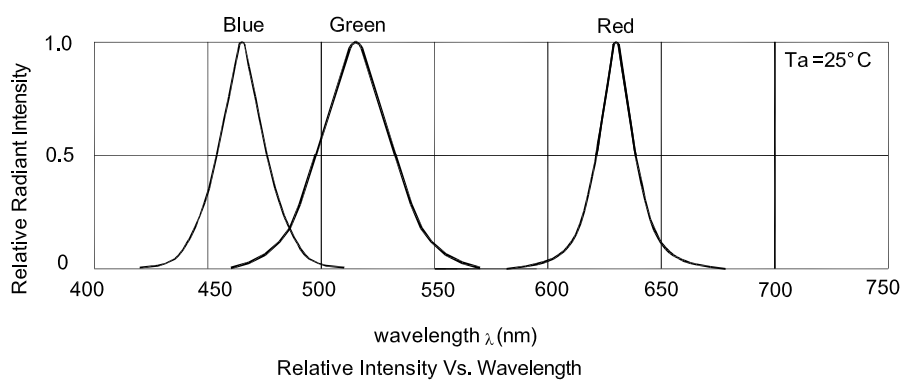
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

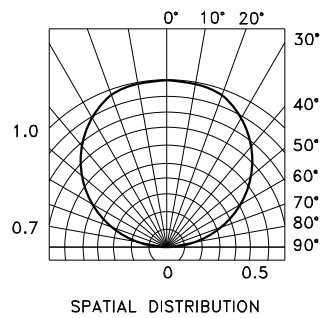
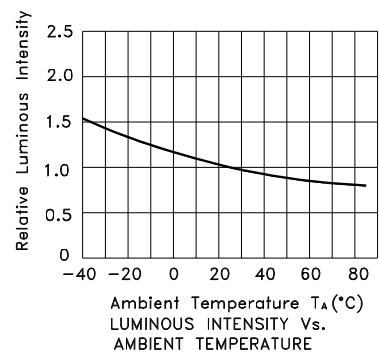
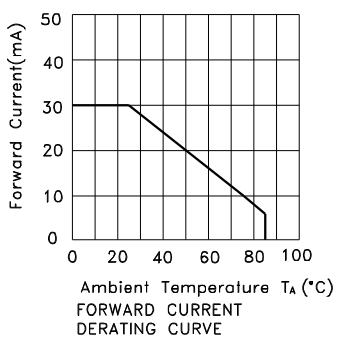
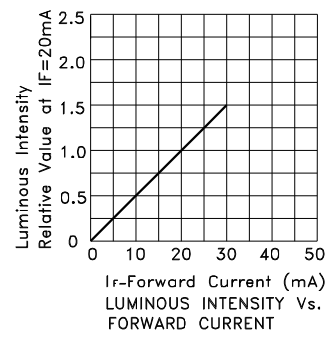
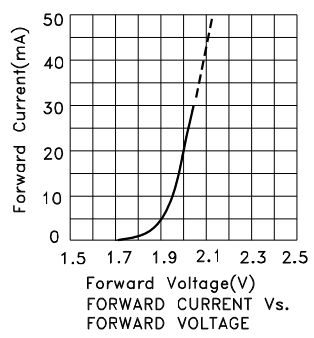
Parameter	Hyper Red	Green	Blue	Units
Power dissipation	75	102.5	120	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	195	150	150	mA
Electrostatic Discharge Threshold (HBM)	3000	450	250	V
Reverse Voltage	5			V
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

### Notes:

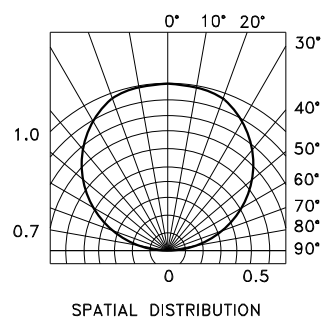
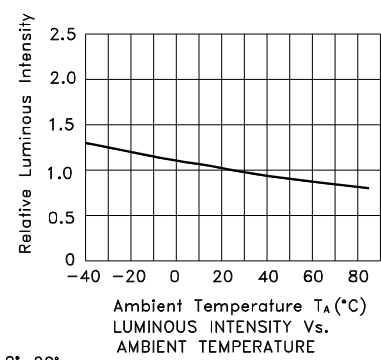
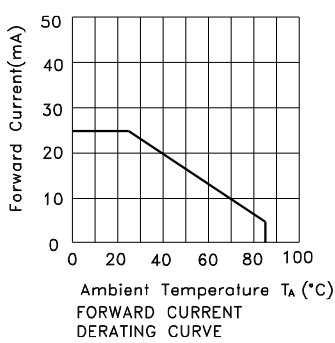
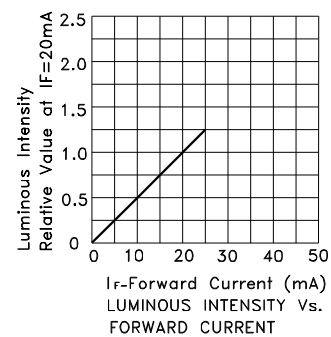
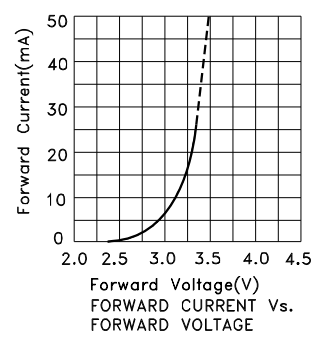
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



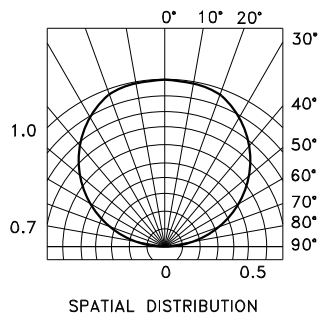
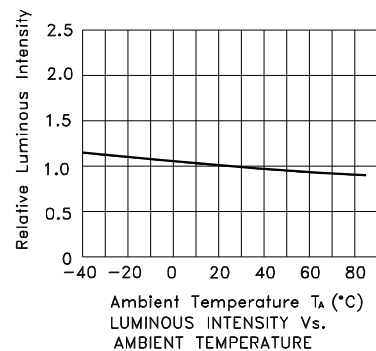
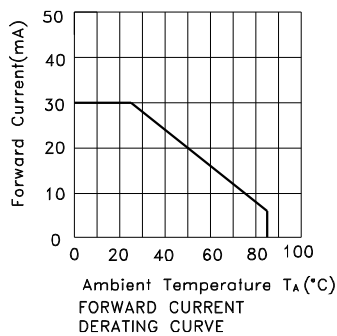
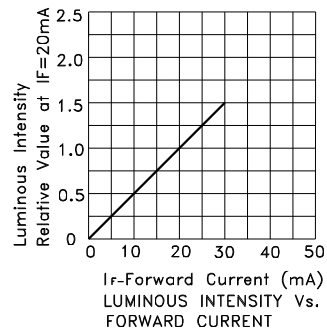
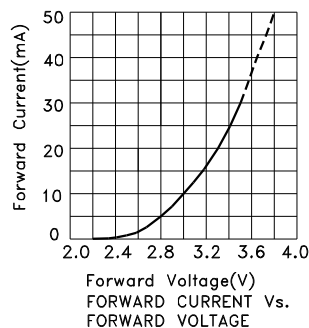
## APFA3010SEEZGKBKC Hyper Red



Green



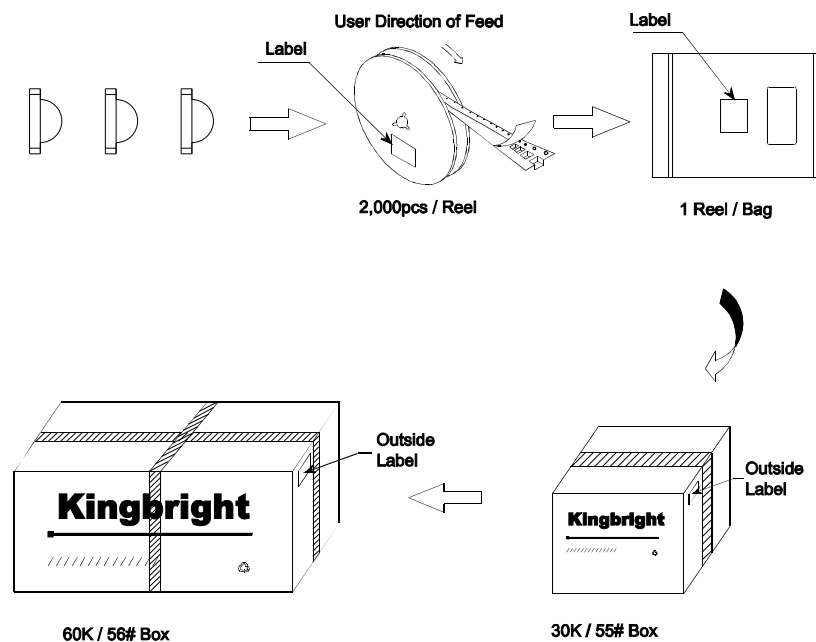
## Blue






## PACKING & LABEL SPECIFICATIONS

APFA3010SEEZGKBKC



<b>Kingbright</b>		
P/NO: APFA3010xxx		
QTY: 2,000 pcs	Q.C.	<div>Q.C. xxxxxxx PASSED</div>
S/N: XXXX		
CODE: XXX		
LOT NO:		
		
RoHS Compliant		

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