

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APTF3216PBAVGASUK	Blue (InGaN)	WATER CLEAR	18	60	120°
	Green (InGaN)		50	150	
	Hyper Red (AlGaInP)		70	220	

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
λpeak	Peak Wavelength	Blue Green Hyper Red	468 520 650		nm	If=20mA
λD [1]	Dominant Wavelength	Blue Green Hyper Red	470 525 630		nm	If=20mA
Δλ1/2	Spectral Line Half-width	Blue Green Hyper Red	21 35 28		nm	If=20mA
C	Capacitance	Blue Green Hyper Red	100 100 35		pF	Vf=0V;f=1MHz
Vf [2]	Forward Voltage	Blue Green Hyper Red	3.2 3.2 1.95	4 4 2.5	V	If=20mA
IR	Reverse Current	Blue Green Hyper Red		10 10 10	uA	VR=5V

Notes:

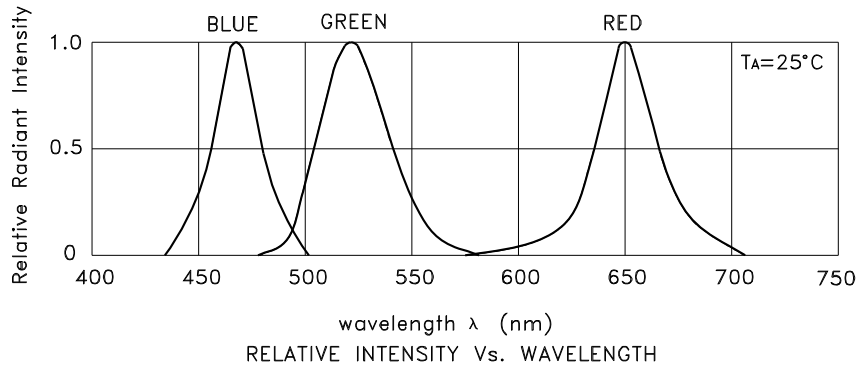
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

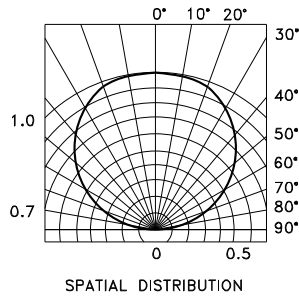
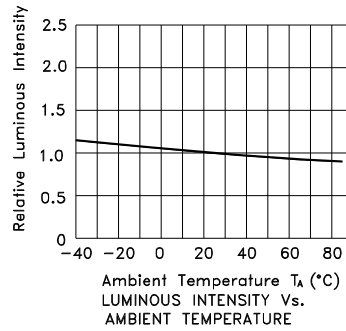
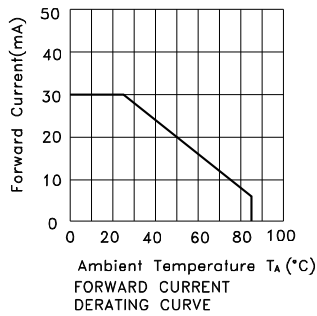
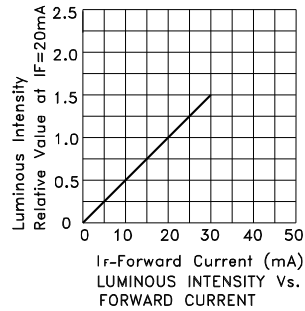
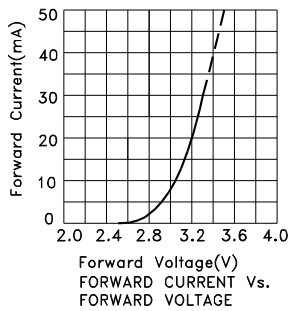
Parameter	Blue	Green	Hyper Red	Units
Power dissipation	120	120	75	mW
DC Forward Current	30	30	30	mA
Peak Forward Current [1]	100	100	185	mA
Reverse Voltage	5			V
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

Note:

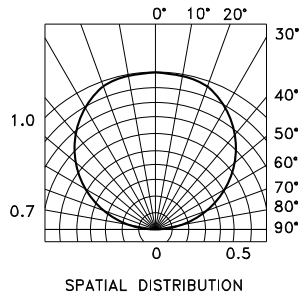
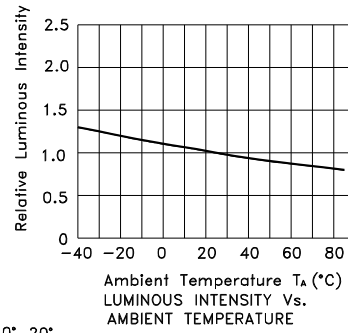
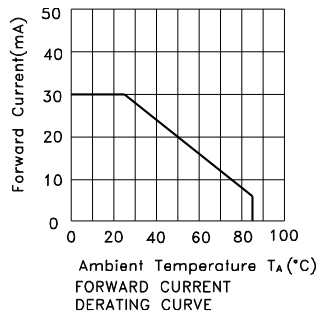
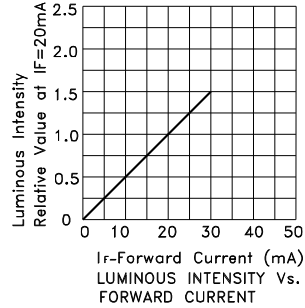
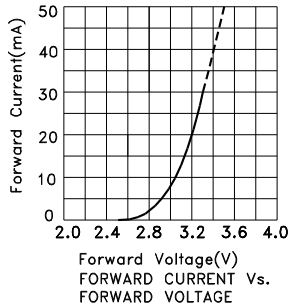
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APTF3216PBAVGASUK Blue

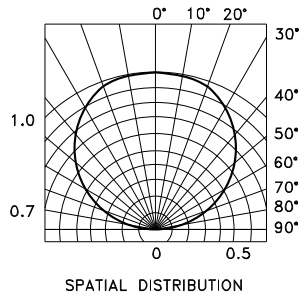
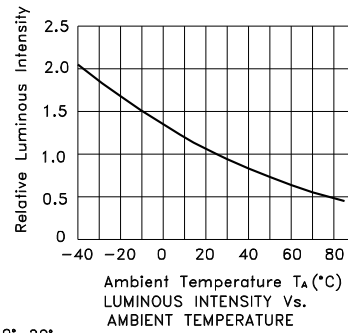
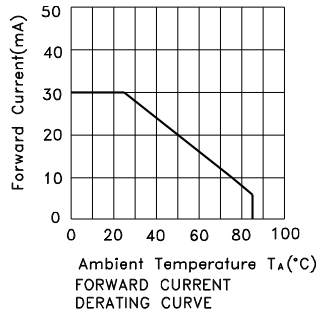
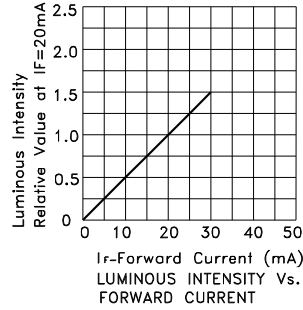
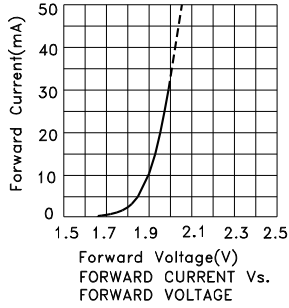


Green



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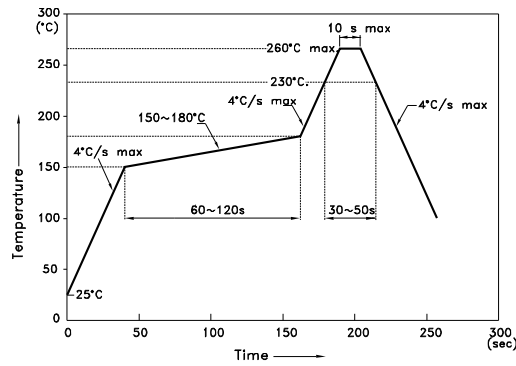
Hyper Red



APTF3216PBAVGASUK

Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

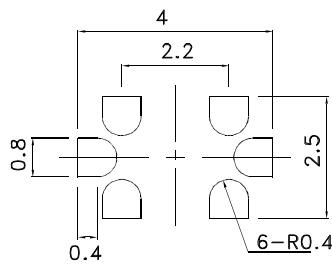
Reflow Soldering Profile For Lead-free SMT Process.



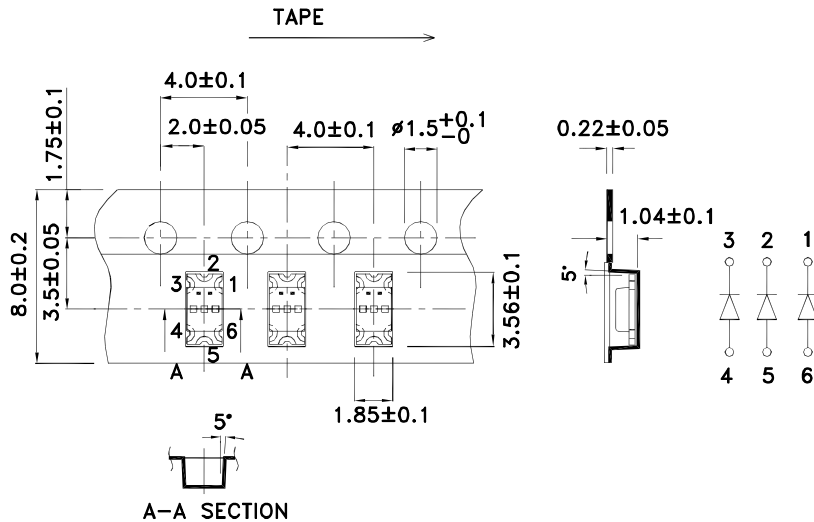
NOTES:

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)



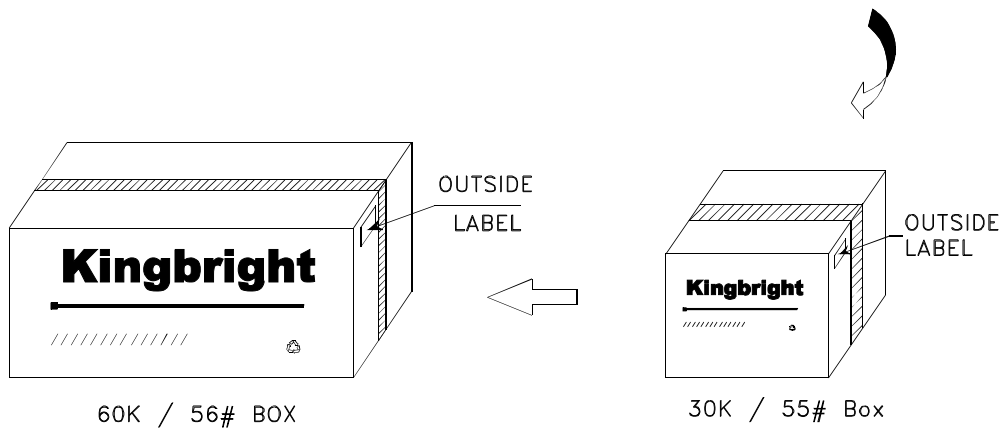
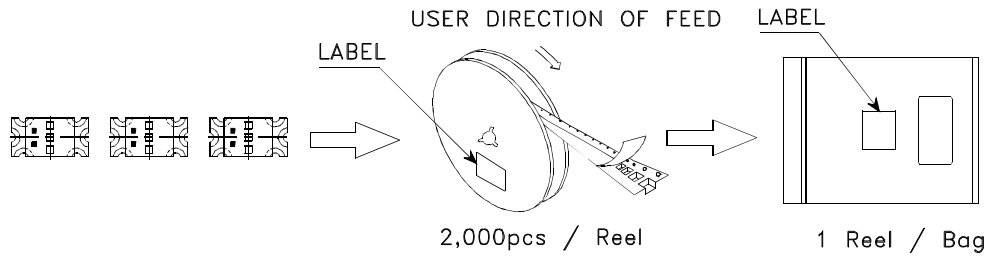
Tape Dimensions (Units : mm)




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PACKING & LABEL SPECIFICATIONS

APTF3216PBAVGASUK



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P/N0: APTF3216xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	