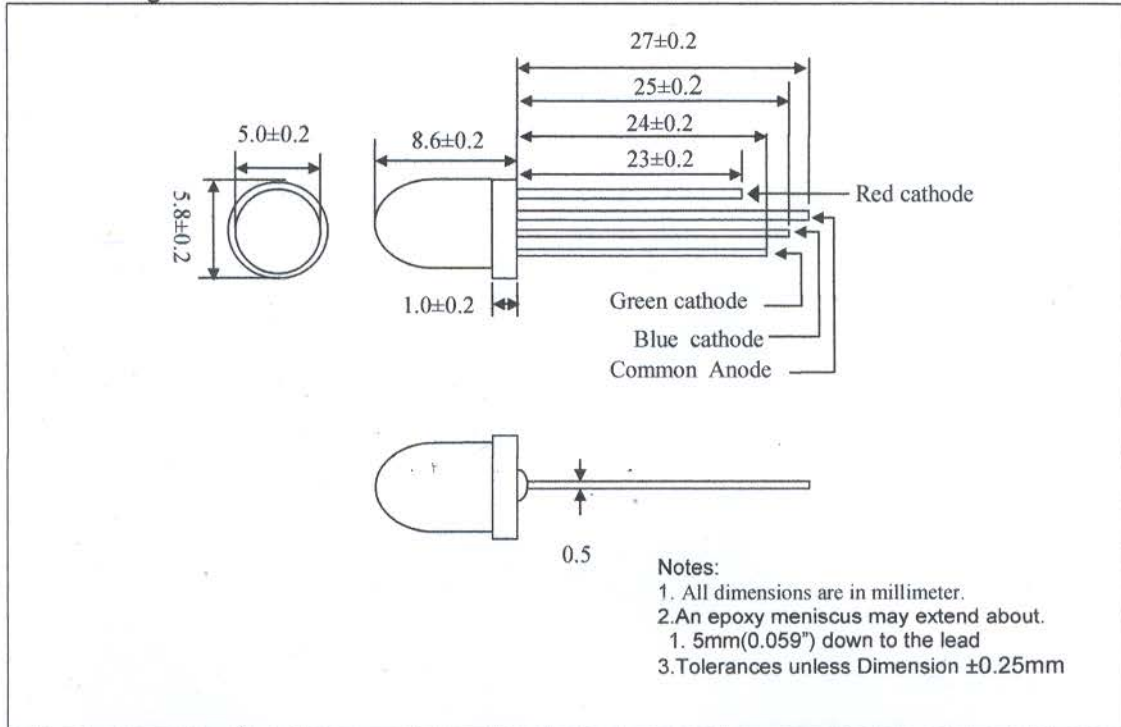


RGB5N30NA RGB 5mm LED Lamp

www.TheLEDLight.com; Contact Sales@TheLEDLight.com

■ Package Dimension:



PART NO.	Chip		Lens Color
	Material	Emitted Color	
YO-RGB5N30N-A	AlInGaP	U/B RED	WATER CLEAR
	InGaN	U/B GREEN	
	InGaN	U/B BLUE	

■ Absolute Maximum Ratings at Ta=25° C

Parameter	Symbol	Rating	Unit
REVERSE CURRENT	Vr	100	μ A
PEAK CURRENT	IF(peak)	100	mA
OPERATING TEMPERATURE RANGE	Topr	-25°C ~ +80°C	+80°C
OPERATING TEMPERATURE RANGE	Tstg	-30°C ~ 100°C	+80°C
DERATING LINEAR 25°C		0.4	mA/°C
LEAD SOLDERING TEMPERATURE RANGE		260°C FOR 5 SECOND.	

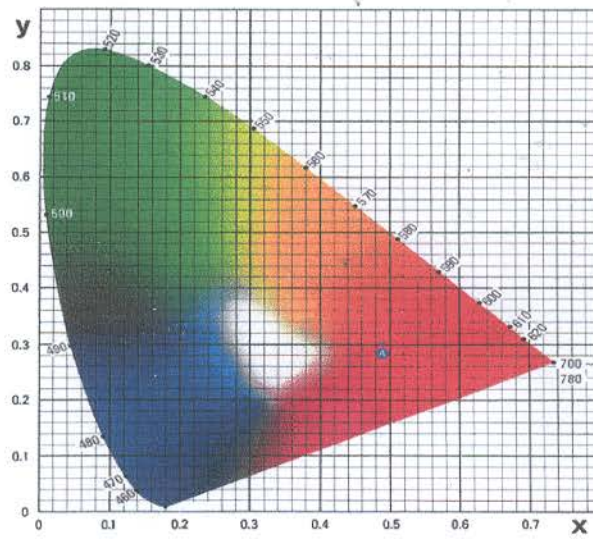
■ Electronic Optical Characteristics:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	IV	R	800	1500	/	mcd IF=20mA
		G	2500	4000		
		B	500	1300		
Viewing Angle	2θ 1/2	R		25.6	/	deg IF=20mA
		G		21.6		
		B		21.6		
Peak Wavelength	λ p	R	/	635	/	nm IF=20mA
		G		525		
		B		475		
Dominant Wavelength	λ d	R	/	625	/	nm IF=20mA
		G		505		
		B		460		
Forward Voltage	VF	R		2.2	2.5	V IF=20mA
		G		3.2	3.5	
		B		3.2	3.5	

■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260° C ±5 ° C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H:+85° C 30min ∩ 5min L:-55° C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H:+100° C 5min ∩ 10set L:-10° C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100° C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55° C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP :25° C IF=20mA	1000 HRS	76 PCS	0/1
7	High Temperature/High Humidity	85° C/85%RH	1000 HRS	76 PCS	0/1

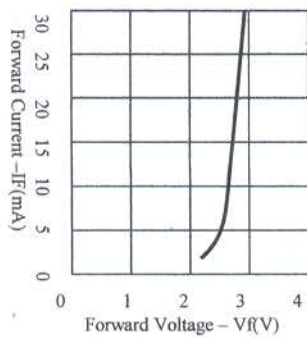
CIE CHROMATICITY DIAGRAM:



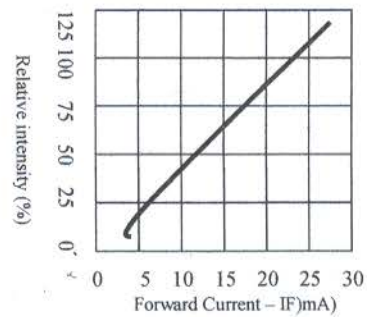
CHARACTERISTICS DIAGRAMS

(R)

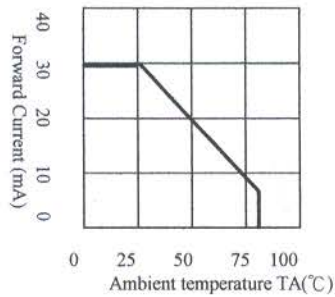
Forward Current VS. Forward Voltage



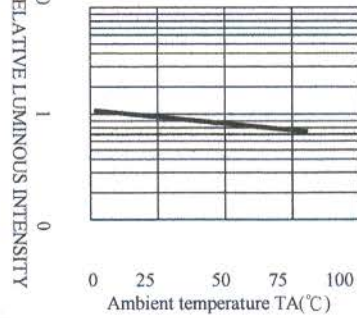
Relative Intensity VS. Forward Current



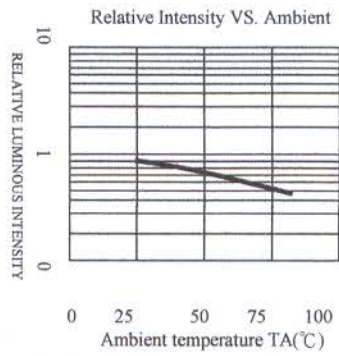
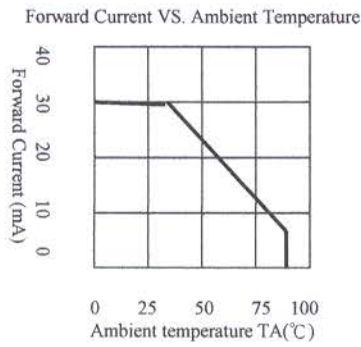
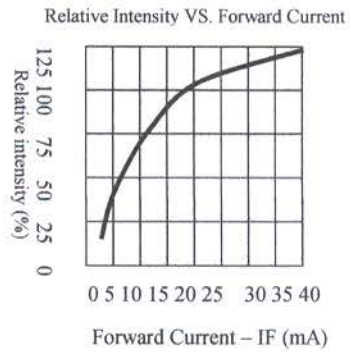
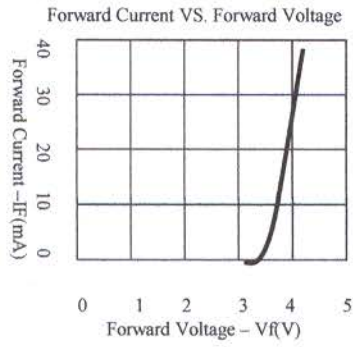
Forward Current VS. Ambient Temperature



Relative Intensity VS. Ambient Temperature



(G)



(B)

