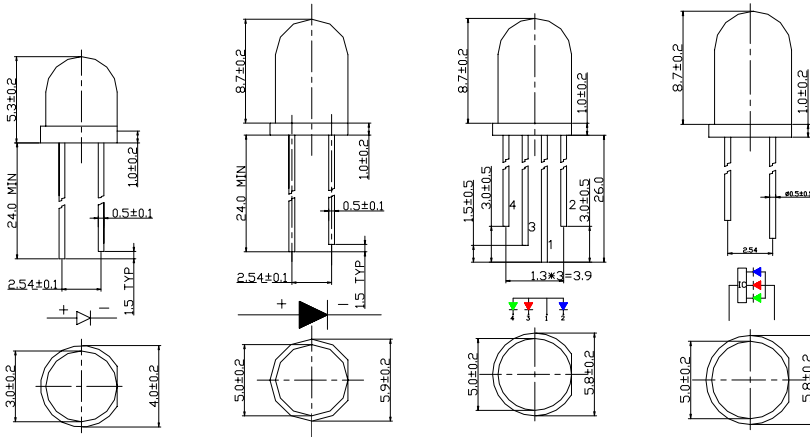
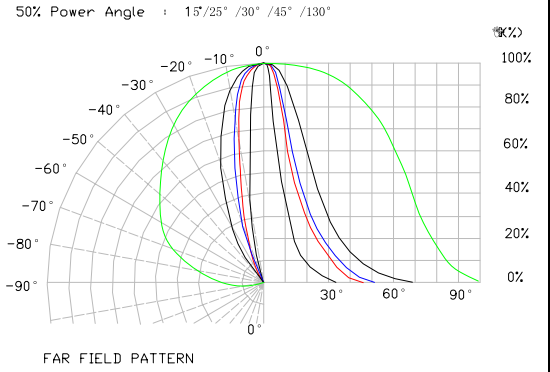


### ■ Outline Dimension(mm)



Full color LED

### ■ Far Field Pattern



### ■ Optical-Electrical Characteristics

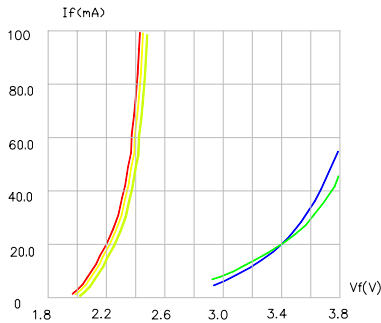


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE

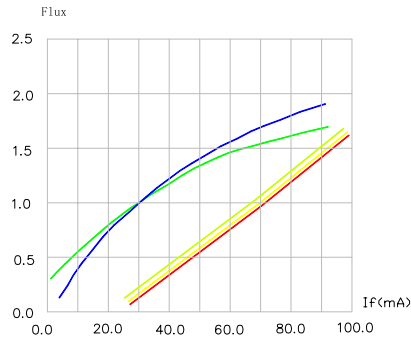


FIG.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

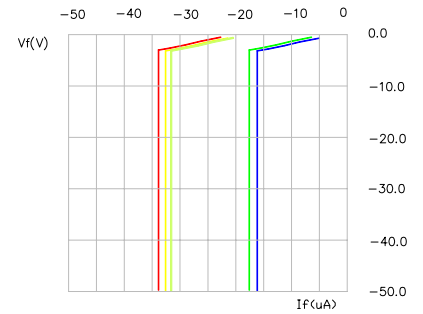


FIG.3 REVERSE CURRENT VS. REVERSE VOLTAGE.

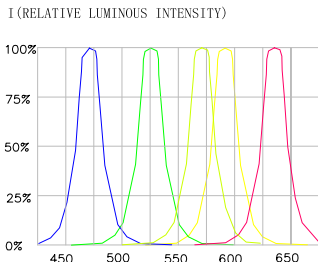


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

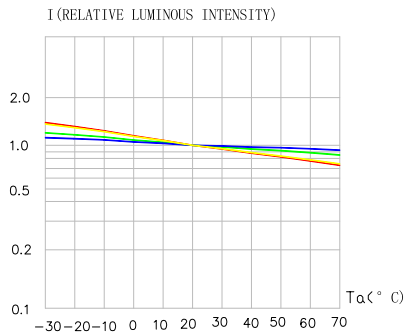


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE.

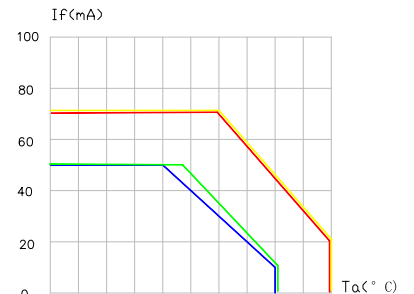


FIG.5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE (Tjmax=95° C).

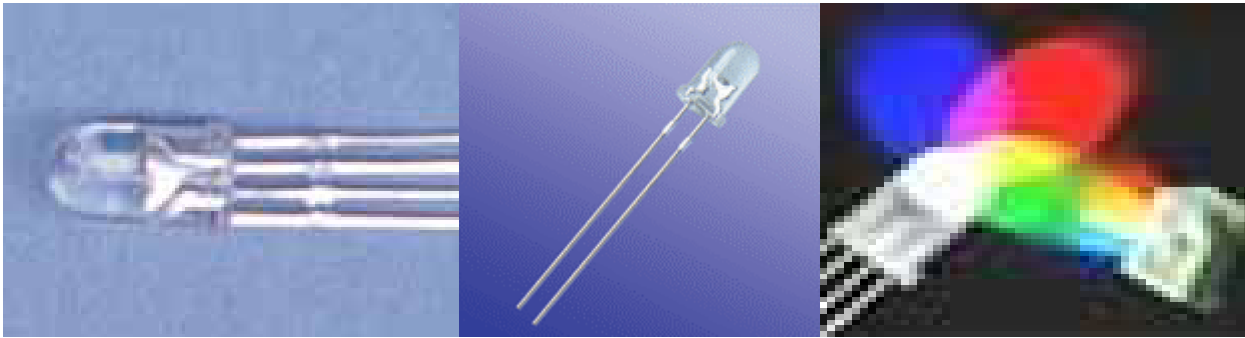

**☺ Features**

- Long life
- Reliable and rugged
- Low power dissipation.

**☺ Application**

- Illuminations;
- LCD Back Light;
- Indicator.

Part NO.	Viewing Angle (deg)	Size	Lens Color	Chip			IV(mcd) (IF=20mA)		Vf(V) (IF=20mA)	
				Material	Emitting Color	$\lambda D(nm)(IF=20mA)$	Min	Typ	Typ	Max
WCN-501HE1-30	30	5mm	Water clear	GaAsP	Red	630	30	60	1.8	2.0
WCN-501HY1-30	30	5mm	Water clear	GaP	Yellow	590	20	40	2.0	2.4
WCN-501SG1-30	30	5mm	Water clear	GaP	Yellow green	570	20	40	2.0	2.4
WCN-301RD1-45N	45	3mm	Water clear	GaP	Red	630	3	9	1.8	2.0
WCN-301YG1-45N	45	3mm	Water clear	GaP	Yellow green	570	40	60	2.0	2.4
WCN-501HR1-15N	15	5mm	Water clear	AllnGaP	Red	625	6000	8000	2.0	2.4
WCN-502HR1-15N	15	5mm	Water clear	AllnGaP	Red	625	2700	4000	2.0	2.4
WCN-503HR1-15N	15	5mm	Water clear	AllnGaP	Red	615	2700	4000	2.0	2.4
WCN-301PK1-20N	20	3mm	Water clear	AllnGaN	Pink	---	800	1000	3.3	4.0
WCN-503HR1-20N	20	5mm	Water clear	AllnGaP	Red	620	2000	3000	2.0	2.4
WCN-501HR1-25N	25	5mm	Water clear	AllnGaP	Red	625	2500	3000	2.0	2.4
WCN-502HR1-25N	25	5mm	Water clear	AllnGaP	Red	625	1500	2000	2.0	2.4
WCN-503HR1-25N	25	5mm	Water clear	AllnGaP	Red	620	1800	2000	2.0	2.4
WCN-501PG1-25N	25	5mm	Water clear	AllnGaN	Pure green	520	6000	7500	3.3	4.0
WCN-501CB1-25N	25	5mm	Water clear	AllnGaN	Blue	470	2700	3200	3.3	4.0
WCN-502HR1-30N	30	5mm	Water clear	AllnGaP	Red	620	2700	4000	2.2	2.6
WCN-501YG1-30N	30	5mm	Water clear	AllnGaP	Yellow green	570	200	300	2.2	2.6
WCN-501PG1-30N	30	5mm	Water clear	AllnGaN	Pure green	525	4000	5000	3.3	4.0
WCN-501CB1-30N	30	5mm	Water clear	AllnGaN	Blue	470	1200	1500	3.3	4.0
WCN-501HR1-35N	35	5mm	Water clear	AllnGaP	Red	620	1800	2500	2.2	2.6
WCN-501UY1-35N	35	5mm	Water clear	AllnGaP	Yellow	590	800	1000	2.2	2.6
WCN-501HR1-45N	45	5mm	Water clear	AllnGaP	Red	625	800	1000	2.2	2.6
WCN-501PG1-45N	45	5mm	Water clear	AllnGaN	Pure green	525	2700	4000	3.3	4.0
WCN-501CB1-45N	45	5mm	Water clear	AllnGaN	Blue	470	1200	1500	3.3	4.0



Part NO.	Viewing Angle (deg)	Size	Lens Color	Chip			IV(mcd) (IF=20mA)		Vf(V) (IF=20mA)	
				Material	Emitting Color	$\lambda D(nm)(IF=20mA)$	Min	Typ	Typ	Max
WCN-301RGB-15N	3mm	15	Water Clear	GaAlAs	Red	630	500	600	3.3	4.0
				InGaN	Pure Green	525				
				InGaN	Blue	470				
WCN-501RGB-15N	5mm	15	Water Clear	AlInGaP	Red	625	500	600	3.3	4.0
				AlInGaN	Pure Green	525				
				AlInGaN	Blue	470				
WCN-502RGB-15N	5mm	15	Water Clear	AlInGaP	Red	625	500	600	2.0	2.4
				AlInGaN	Pure Green	525			3.3	4.0
				AlInGaN	Blue	470			3.3	4.0
WCN-531FC1-130N	5mm	130	Water Clear	AlInGaP	Red	625	200	400	2.0	2.4
				AlInGaN	Pure Green	525			3.3	4.0
				AlInGaN	Blue	470			3.3	4.0