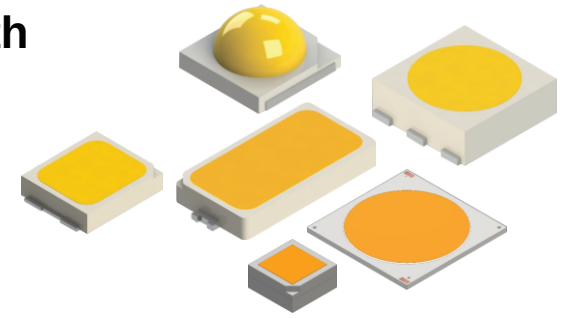
LED for Horticulture

Features of Allix LED for Plant Growth



ALLIX’s phosphor conversion technology

ALLIX has developed its specialized Plant-Growth LED package with own outstanding phosphor conversion technology.
Two different wavelengths can be emitted in a single LED package.

Characteristics of SMD 5630 PKG.

Phosphor Converted LED

Device No.	Wp[nm]	Wd[nm]	PPF [μmol/s]	PPF/W [μmol/J]	Iv[mcd]	CIE x	CIE y	IF[mA]	VF[V]
AT56SNP (PG645)	640	590	0.52	1.10	11050	0.5223	0.4033	150	3.2
AT56SNP (PG655)	651	617	0.43	0.89	3810	0.6643	0.3154	150	3.2
AT56SNW (PGWH)	635	602	0.63	1.32	13710	0.3959	0.3400	150	3.2
AT56SNP (PGRB)	649	831	0.53	1.11	6170	0.4270	0.2066	150	3.2

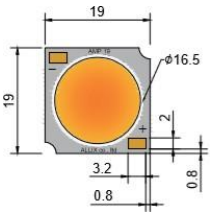
Pure chip type

Device No.	Wp[nm]	Wd[nm]	PPF [μmol/s]	PPF/W [μmol/J]	Iv[mcd]	CIE x	CIE y	IF[mA]	VF[V]
AT56SNB (PG455)	455	458	0.45	1.44	2600	0.1494	0.0302	100	3.1
AT56SNR (PG660)	664	648	0.36	1.53	1900	0.7129	0.2867	100	2.3
AT56SNI (PG730)	736	648	0.11	0.77	Φe[mw] 17	0.7291	0.2781	65	2.2

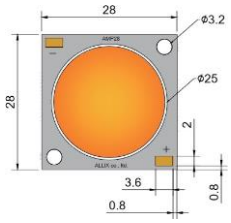
* All measured values are typical.
* PAR is the photosynthetic active radiation from 400 to 700nm.
* PG730 typical PPF is measured from 700 to 800nm.
* The maximum current is 180 ~ 200mA.

COB

Phosphor Converted COB



AMP19 Series

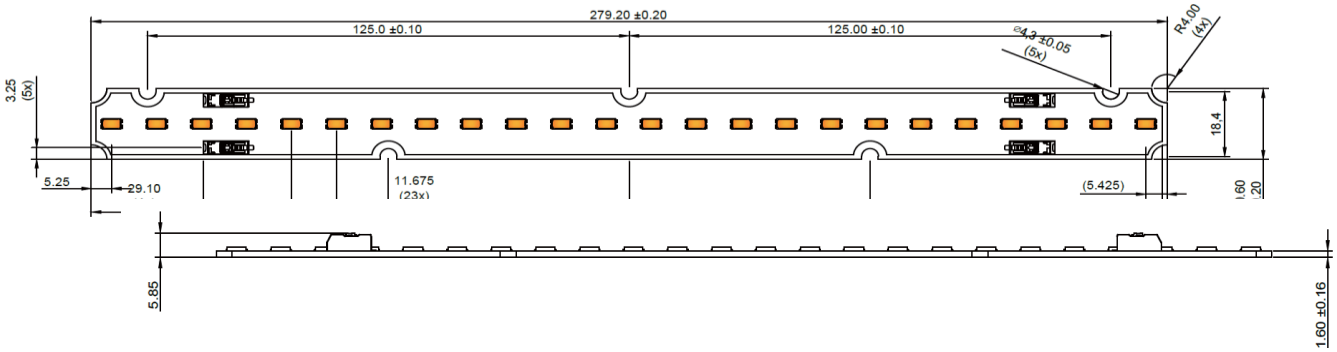


AMP28 Series

Device No.	Wp[nm]	Wd[nm]	PPF [μmol/s]	PPF/W [μmol/J]	Lumen [lm]	CRI	IF[mA]	VF[V]
AM19P-P26 (PGWH)	451	603	40.2	1.55	1910	80	720	36
AM19P-P26 (PGRB)	450&645	-	36.6	1.41	1350	-	720	36
AM28W-P38 (PGWH)	451	603	62.8	1.63	3850	80	1050	36
AM28P-P38 (PGRB)	450&645	-	60.1	1.56	1900	-	1050	36
AM28W-P80 (PGWH)	451	603	127.4	1.55	7900	80	1500	54
AM28W-P80 (PGRB)	450&645	-	120.0	1.46	3800	-	1500	54

Module

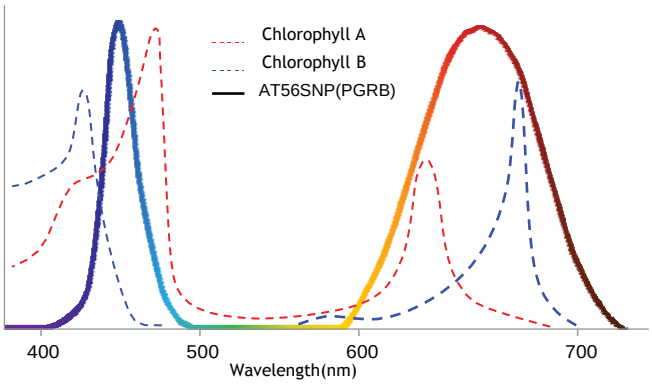
Phosphor Converted LED Module



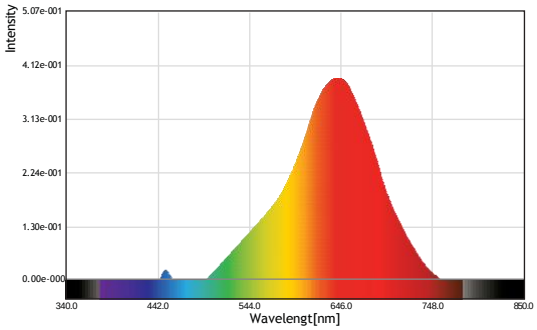
Device No.	Length [mm]	Width [mm]	PPF [μmol/s]	PPF/W [μmol/J]	Color	CCT[K]	Power[W]	IF[mA]	VF[V]
ALM280(20) (PGRB)	280	20	15.7~19.2	1.77~1.85	PGRB	1370	8.5~10	240~300	35~37

Spectrum

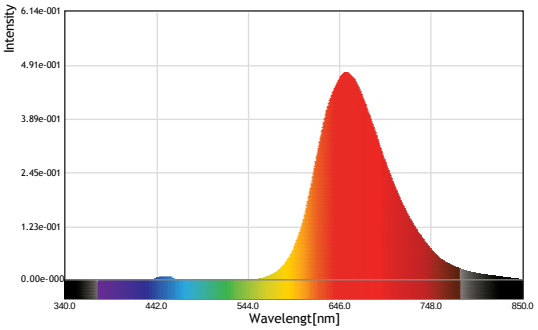
ALLIX PG LED provides wavelength absorbed chlorophyll A and chlorophyll B required for plant growth in one LED package, so the plants are provided with more equal light rather than when conventional method of Red & Blue chip LED combination is used. In particular, ALLIX own technology of phosphor conversion method can be used to make a rich spectrum in the Red area.



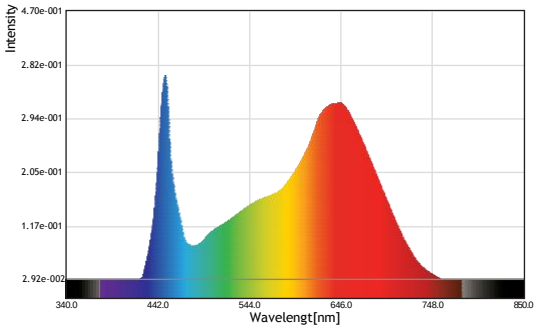
Phosphor Converted LED



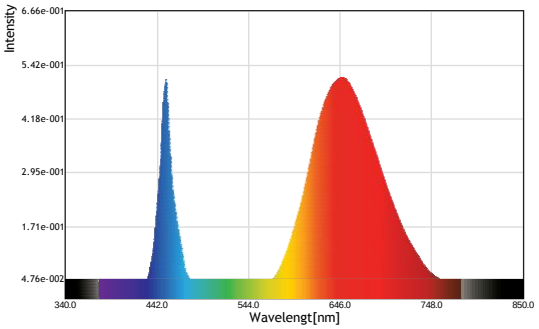
AT56SNP(PG645)



AT56SNP(PG655)

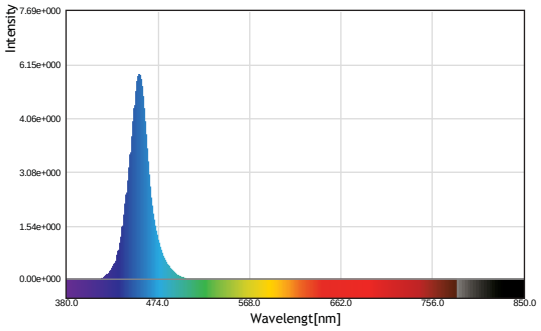


AT56SNW(PGWH)

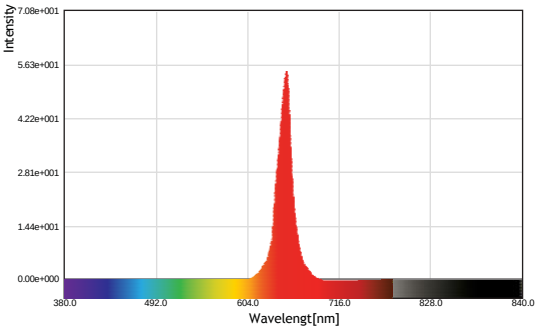


AT56SNP(PGRB)

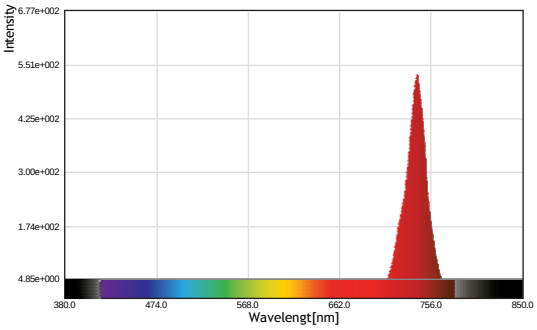
Pure chip type



AT56SNB(PG455)



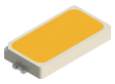
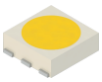
AT56SNB(PG660)



AT56SNI(PG730)

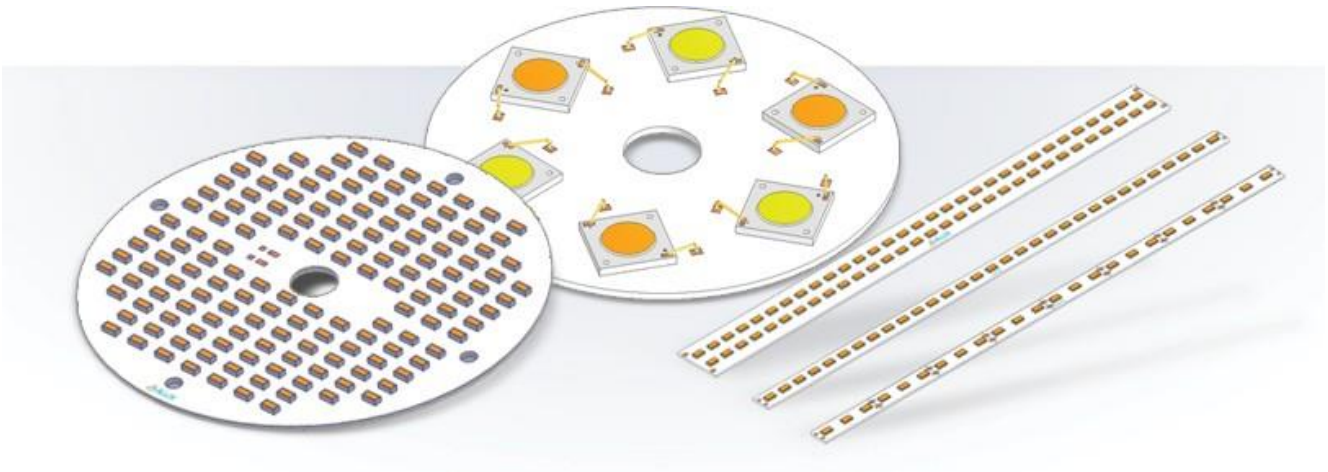
Package List

Available in all package type.

Type	Size	Advantage
SMD	5630 	- Standard model. - Highest efficiency. - Suitable for middle power LED.
	5450 	- Versatility is good when replacing the existing light source. - Wide LES (Light-Emitting Surface) compared to other SMD.
	2835 	- Small size, multiple devices can be mounted on the same area. - Suitable for middle power LED with wide heat dissipation slug.
	3535 	- Produced by flip chip method suitable for 1W high power purpose. - Dome lens application.
	1818 	- Produced by flip chip method 1 to 2 W high power suitable for purpose. - Power with large area ratio.
COB	13 × 13 ~ 38 × 38 (mm) 	- Ideal for high light requirements in a small area. - 4 ~ 100W can be designed by size. - High wattage in small area compared to SMD type.

Available in Any color, Any size, Any shape

From linear shape to round shape, we can tailor-make your own board.



Contact us

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