



## About ProLight

Established in 2004, ProLight Opto has been providing customers products and services based on our high-power LED packaging technologies.

Along with the general trend of integrated development of the global LED industry, ProLight Opto became a key member of Ennostar Inc. in 2021. To catch up with the development trend of compound semiconductor technology, taking the advantages of Ennostar's upstream resources and our strengths of high-power LED packaging technologies accumulated over more than 10 years, ProLight Opto will continue to lead the market in providing customers differentiated products of total LED solutions for various applications with our innovative technologies, diversified products and trustful services.

# Automotive Series CATALOGUE

# Headlamp



Pro-CSP adopts the evolutionary new phosphor film technology which provide better light uniformity and reliability.

All series passed AEC-Q102 test.

Watt	Part No.	Color	Test Current(mA) Max Current(mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
7	PBVB-7FWU-F2G	White	1000	6.5	600	700	5620 K	120
			1200	6.6	680	805	5880 K 6150 K 6450 K	
10	PBVC-10FWU-F3G	White	1000	9.7	900	1100	5620 K	120
			1200	9.9	1000	1250	5880 K 6150 K 6450 K	
14	PBVD-14FWU-F4G	White	1000	12.9	1100	1400	5620 K	120
			1200	13.1	1300	1600	5880 K 6150 K 6450 K	
17	PBVE-17FWU-F5G	White	1000	16.2	1400	1650	5620 K	120
			1200	16.5	1600	1900	5880 K 6150 K 6450 K	
31	PBVF-31FWU-F9G	White	1000	30.1	2750	3200	5620 K	120
			1200	30.5	3150	3650	5880 K 6150 K 6450 K	
4	PBVA-4FWE-F1G	White	1000	3.2	310	350	5620 K	120
			1200	3.3	355	400	5880 K 6150 K 6450 K	
7	PBVB-7FWE-F2G	White	1000	6.5	600	700	5620 K	120
			1200	6.6	680	805	5880 K 6150 K 6450 K	
10	PBVC-10FWE-F3G	White	1000	9.7	900	1100	5620 K	120
			1200	9.9	1000	1250	5880 K 6150 K 6450 K	
14	PBVD-14FWE-F4G	White	1000	12.9	1100	1400	5620 K	120
			1200	13.1	1300	1600	5880 K 6150 K 6450 K	
17	PBVE-17FWE-F5G	White	1000	16.2	1400	1650	5620 K	120
			1200	16.5	1600	1900	5880 K 6150 K 6450 K	



Brand-new continuous padding LED delivers excellent light uniformity without dark area, and higher lumens (approx. 10% increase) than conventional version.

Watt	Part No.	Color	Test Current(mA) Max Current(mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
10	PBVC-10FWE-F3G1	White	1000	9.7	1000	1150	5620 K	120
			1200	9.9	1130	1290	5880 K 6150 K 6450 K	
14	PBVD-14FWE-F4G1	White	1000	12.9	1350	1520	5620 K	120
			1200	13.1	1500	1700	5880 K 6150 K 6450 K	
17	PBVE-17FWE-F5G1	White	1000	16.2	1650	1880	5620 K	120
			1200	16.5	1850	2100	5880 K 6150 K 6450 K	
12	PBSC-12FWE-H3G	White	1000	9.7	1250	1300	5620 K	120
			1500	10.2	1720	1790	5880 K 6150 K 6450 K	
10	PB2N-10FWE-SD	White	1000	3.0	284.5	320	6500 K	120
			3000	3.5	740	830		



Special 9 voltage design (PBSC) can reduce the design cost of power supply and increase brightness up to 35%.

# Exterior Lighting

## 3535 series



size : 3.45 X 3.45 mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
AK2N-WA1HL-2	White	350	3.1	130	135	5500 K	130
AK2N-PB1HL-A	PC Amber	350	3.1	120	135	589 nm	130

## 3030 series



size : 3.0 X 3.0 mm

AJ2N-WA1DF-2	White	150	3.2	55	65	5850 K	120
AJ2N-PA1DF-A	PC Amber	150	3.2	50	55	589 nm	120
AJ2N-RA1DF	Red	150	2.2	18.1	20	623 nm	120
AJ2N-GA1DF	Green	150	3.2	30.6	35	525 nm	120
AJ2N-BA1DF	Blue	150	3.2	6.3	9.0	465 nm	120
PJ2N-2FPE-A2	PC Amber	350	3.1	100	125	589 nm	120

## PLCC 3334 series



size: 3.3X 3.0mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
AL6A-WA1EF-2	White	140	3.1	11.2	16.0	7160 K	120
AL6A-NA1EF-4	Neutral White	140	3.1	11.2	14.5	4050 K	120
AL6A-RA1DF	Red	140	2.2	5.6	7.2	621 nm	120
AL6A-GA1EF	Green	140	3.25	4.5	9.0	525 nm	120
AL6A-BA1EF	Blue	140	3.1	2.24	3.5	470 nm	120
AL6A-PA1EF-A	PC Amber	140	3.1	9.0	11.5	590.8 nm	120

## PLCC 2016



size : 2.0 X 1.6 mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
AV2N-WA1AF-1	White	50	3.2	13.9	20	5850 K	120
AV2N-AA1AF-A	PC Amber	50	3.2	13.9	15.8	589 nm	120

## 2016 series



size : 2.0 X 1.6 mm

AF2N-WA1JF-2	White	1000	3.5	200	250	5610 K 5850 K 6100 K 6370 K 6650 K	120
AF2N-PA1JF-A	PC Amber	1000	3.5	160	200	-	120

# Warning Light

## 3030 series



size : 3.0 X 3.0 mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ 1/2
PJ2E-1FRE	Red	350	2.60	30	42	623 nm	120
PJ2E-1FGE	Green	350	3.60	50	65	525 nm	120
PJ2E-1FBE	Blue	350	3.60	10.7	15.5	465 nm	120
PJ2N-FFWE	White	150	3.20	55	65	5850 K	120
PJ2N-1FWE-2	White	300	3.20	110	128	5850 K	120
PJ2N-FFPE-A	PC Amber	150	3.20	45	51	589 nm	120
PJ2N-2FPE-A2	PC Amber	350	3.10	100	125	589 nm	120
AJ2N-AA1FF	Amber	350	2.20	23.5	31.3	592 nm	120

## 3030 series



size : 3.0 X 3.0 mm

PJ2E-2LWE-2	White	300	3.10	130	150	5850 K	130
PJ2E-2LPE-A2	PC Amber	350	3.10	110	120	589 nm	130

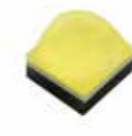
## 3535 series



size : 3.45X 3.45 mm

PK2E-2LWE-B2R7S	White	350	3.05	160	175	6000K	130
PK2N-3LRE-SD	Red	350	2.2	50	64	623 nm	130
PK2N-3LRE-N	Red	350	2.2	50	64	623 nm	130
PK2N-3LGE-SD	Green	350	3.1	80	150	525 nm	130
PK2N-3LBE-SD	Blue	350	3.1	23.5	29	465 nm	130
PK2N-4LBE-MVSD	Blue	350	3.0	39.5	47	477.5 nm	130
PK2N-5LBE-MSD	Blue	350	3.2	39.8	45	480 nm	130
PK2N-2LPE-B2	PC Blue	350	3.1	30	50	470 nm	130
PK2N-3LPE-B3	PC Blue	350	3.1	60	80	470 nm	130
PK2N-2LPE-A2	PC Amber	350	3.1	120	140	589 nm	130
PK2N-3LPE-ASD	PC Amber	350	3.2	80	100	589 nm	130
PK2N-4LRE-SASD	PC Amber	350	2.95	90	112	589 nm	130
PK2N-3LAE-SD	Amber	350	2.2	50	70	592 nm	130

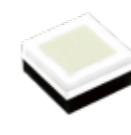
## 1616 series



size : 1.6X 1.6 mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ 1/2
PQ2N-4LWE-WFC	White	350	3.0	140	148	5600 K	130
PQ2N-4LNE-WFC	Neutral White	350	3.0	140	148	4255K	130
PQ2N-4LVE-WFCR8	Warm White	350	3.0	110	125	2900 K	130
PQ2N-4LRE-W	Red	350	2.15	50	67	620.5 nm	130
PQ2N-4LGE-W	Green	350	3.1	90	133	525 nm	130
PQ2N-4LME-W	Crimson	350	2.15	335mW	380mW	660 nm	130
PQ2N-4LBE-WFC	Blue	350	3.0	35	47	477.5 nm	130
PQ2N-4LDE-WFC	Royal Blue	350	3.1	435mW	560 mW	455 nm	130
PQ2N-4LPE-AWFC	PC Amber	350	3.0	80	107	589.7 nm	130

## 1616 series



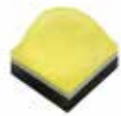
size : 1.6X 1.6 mm

PQ2A-3FWE-WFCR95	White	350	3.0	90	100	5340K	130
PQ2A-3FVE-WFCR95	Warm White	350	3.0	80	93	2900K	130
PQ2A-4FWE-WFC	White	350	3.0	110	125	5600K	130
PQ2A-4FRE-W	Red	350	2.15	30	52	623 nm	130
PQ2A-4FGE-W	Green	350	3.1	80	98	525 nm	130
PQ2A-4FCE-W	Cyan	350	3.1	60	72	505 nm	130
PQ2A-4FBE-WFC	Blue	350	3.1	23.5	33	475 nm	130
PQ2A-4FDE-WFC	Royal Blue	350	3.1	435mW	540nW	455 nm	130
PQ2A-4FME-W	Crimson	350	2.15	275mW	305mW	660 nm	130
PQ2A-4FPE-AWFC	PC Amber	350	3.0	70	80	589.7 nm	130

# Warning Light

In comparison with 1616 series, 1616+ series has a larger reflective area and higher brightness. Pad is compatible with 1616 series.

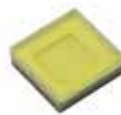
## 1616+ series



size : 2.0X 2.0mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
PT2N-4LWE-WFC	White	350	2.8	140	160	5600 K	130
PT2N-4LBE-WFC	Blue	350	3.0	35	47	477.5 nm	130
PT2N-4LPE-AWFC	PC Amber	350	2.8	90	105	589.7 nm	130

## 1616+ series



size : 2.0X 2.0mm

PT2A-4FWE-WFC	White	350	3.0	130	145	5600 K	130
PT2A-4FPE-AWFC	PC Amber	350	3.0	80	100	589.7 nm	130
PT2A-4FRE-W	Red	350	2.2	50	60	620.5 nm	130
PT2A-4FGE-W	Green	350	3.1	80	90	525 K nm	130
PT2A-4FBE-WFC	Blue	350	3.0	30	42	477.5 nm	130

## 2020 series

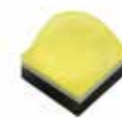


size : 2.0X 2.0mm

PT3N-4LWE-WFC	White	350	3.0	140	160	5600 K	130
PT3N-4LPE-AWFC	PC Amber	350	3.0	90	105	589.7 nm	130
PT3N-4LRE-W	Red	350	2.2	50	68	620.5 nm	130
PT3N-4LGE-W	Green	350	3.1	90	135	525 K nm	130
PT3N-4LBE-WFC	Blue	350	3.0	35	48	477.5 nm	130

2525 series is designed with thermoelectric separation, it can increase heat dissipation efficiency and light efficiency.

## 2525 series



size : 2.45X 2.45mm

Part No.	Color	Test Current (mA)	Vf (Typ.)	Lumens (Min.)	Lumens (Typ.)	CCT (Typ.)	2θ <sub>1/2</sub>
PV2N-4LWE-WFC	White	350	2.8	155	170	5600 K	130
PV2N-4LBE-WFC	Blue	350	3.0	35	47	477.5 nm	130
PV2N-4LPE-AWFC	PC Amber	350	2.8	90	110	589.7 nm	130

