

Cree offers a number of high brightness LED in various package, they include P4, 3mm, 5mm round and oval, SMD PLCC which fits various application in commercial and industrial. Cree LED introduce reliable package as well as high lumen maintenance in LED lighting market.



► FEATURES

- Various package-P4, oval, PLCC, SMD
- Small package size
- Narrow color bins
- High light intensity output
- Available in various angle
- Various color coverage red, green, amber, white, blue

► BENEFITS

- High light intensity output
- Small size for small form factor
- Low power consumption
- Increased energy saving
- Fits various application
- Common package size increase design flexibility

► APPLICATIONS

- General lighting
- Video screen
- Automotive
- Electronic signal sign
- Multi-purpose
- Advertising
- Traffic light
- Moving message sign



Supplier	Cree										
Application	General Lighting						Video Screen			Automotive	
Part No.	CLM3C-WKW	CLP6B-WKW	CP41B-WES	C503C-WAS	CLN6A-WKW -CJ0L0153	CLN6A-MKW -CH0K0133	C5SMF-RJS	C5SMF-GJS	C5SMF-BJS	CP41B-RFS	CP41B-AFS
Technical Performance	min 1400mcd at 20mA driving current	32000lm at 50mA driving current (3 chips)	min 3850lm at 30mA driving current	min 16800mcd at 20mA driving current	min 60.5lm at 300mA	min 51lm at 300mA	min 1100mcd at 20mA driving current	min 2130mcd at 20mA driving current	min 5500mcd at 20mA driving current	min 4400lm at 70mA driving current	min 5500lm at 70mA driving current
Type	2.7 x 2.0 SMD LED	6.0 x 5.0 SMT LED	7.6 x 7.6 P4 LED	5mm Round LED	5.0 x 5.0 x 1.3mm	5.0 x 5.0 x 1.3mm	5mm oval LED	5mm oval LED	5mm oval LED	7.6 x 7.6 P4 LED	7.6 x 7.6 P4 LED
Color	White	White	White	White	Cool White	Warm White	Red	Green	Blue	Red	Amber
Chromaticity Coordinates	(0.30, 0.29)	(0.31, 0.32)	(0.283, 0.264)	(0.2877, 0.2831)	(0.3325, 0.3441)	(0.4234, 0.399)	NA	NA	NA	NA	NA
Wavelength (nm)	NA	NA	NA	NA	NA	NA	619 - 624	520 - 535	460 - 475	620 - 637	584 - 599
Current (mA)	25	3 x 50	30	25	300mA	300mA	50	25	25	70	70
Lens Type	water transparent	water transparent	water transparent lens + stopper	water transparent lens + stopper	Not Specified	Not Specified	Tinted Diffused lens + stopper	Tinted Diffused lens + stopper	Tinted Diffused lens + stopper	water transparent lens + stopper	water transparent lens + stopper
Viewing Angle (q)	120	120	60	15	115	115	110	110	110	70	70
Luminous Flux (mlm)	4200	32000	7000	NA	60.5lm	51lm	NA	NA	NA	7500	7000
Luminous Intensity (mcd)	1400	10000	5200	24000	NA	NA	2200	4400	1100	NA	NA
1K Pcs. Ref. Price (USD)	0.125	0.666	0.315	0.278	1.573	1.573	0.185	0.296	0.296	0.176	0.176

Supplier	Cree									
Application	Electronic Signal Sign					Multi-Purpose				
Part No.	C503B-RCS	C503B-ACS	C503T-GCS	C503B-BCS	CLA1A-WKW	CLM4B-RKW	CLM4B-AKW	CLM4B-GKW	CLM4B-BKW	
Technical Performance	min 3000mcd at 20mA driving current	min 3000mcd at 20mA driving current	min 4180mcd at 20mA driving current	min 1520mcd at 20mA driving current	min 1800mcd at 30mA driving current	min 1120mcd at 50mA driving current	min 1120lm at 50mA driving current	min 1400mcd at 30mA driving current	min 355mcd at 30mA driving current	
Type	5mm oval LED	5mm round LED	5mm round LED	5mm round LED	3.2 x 2.8 SMT LED	3.2 x 2.7 SMT LED	3.2 x 2.7 SMT LED	3.2 x 2.7 SMT LED	3.2 x 2.7 SMT LED	
Color	Red	Amber	green	Blue	White	Red	Amber	Green	Blue	
Chromaticity Coordinates	NA	NA	NA	NA	(0.31, 0.32)	NA	NA	NA	NA	
Wavelength (nm)	618 - 630	584 - 596	520 - 535	465 - 475	NA	618 - 630	584 - 599	515 - 535	460 - 480	
Current (mA)	50	50	25	25	30	70	70	30	30	
Lens Type	water transparent lens + stopper	water transparent lens + stopper	water transparent lens + stopper	water transparent lens + stopper	water transparent	water transparent	water transparent	water transparent	water transparent	
Viewing Angle (q)	30	30	30	30	120	120	120	120	120	
Luminous Flux (mlm)	NA	NA	NA	NA	7000	4200	4000	NA	NA	
Luminous Intensity (mcd)	5100	5000	7500	2100	1800	1600	1500	1800	550	
1K Pcs. Ref. Price (USD)	0.146	0.146	0.278	0.315	0.278	0.185	0.185	0.305	0.287	

High Power XP and MCE LED (Cree)

Cree MCE multi chip LED is a lighting-class multi-chip LED which build in 4 LED chip that provides 4 times the flux of the XLamp XR-E LED in the same footprint. MCE utilize the same color temperature segment with XR series LED. Compare with single die LED, it reduces the system complexity and part counts and fit various lighting application.



► SUPPLIERS
CREE

► FEATURES

- Industry first lighting class LED
- Small package size 7.0 x 9.08 pins
- Narrow color bins
- High light intensity output
- Individually addressable LED chip
- Low thermal resistance (3C/ W)
- Same color bin as XR LED

► BENEFITS

- High light intensity output
- Small size for small form factor
- Low power consumption
- Increased energy saving
- Fits various application
- Ease of thermal and optic design
- Reduce total system cost

► APPLICATIONS

- General lighting
- High end protable
- Light bar
- Street light
- Retrofit
- Area lighting

Supplier	Cree											
	Cool White			Neutral White				Warm White				
Part No.	MCE4WT-A2-0000-000M01	MCE4WT-A2-0000-000K01	MCE4WT-A2-0000-000KA1	MCE4WT-A2-0000-000KA4	MCE4WT-A2-0000-000JA1	MCE4WT-A2-0000-000JA3	MCE4WT-A2-0000-000HF8	MCE4WT-A2-0000-000GE7	MCE4WT-A2-0000-000HA8	MCE4WT-A2-0000-000HAA	MCE4WT-A2-0000-000GA7	MCE4WT-A2-0000-000GAA
Technical Performance	min. 430lm @350mA, full bins	min. 370lm @350mA, full bins	min. 370lm @350mA, 6 bins	min. 370lm @350mA, 6 bins	min. 320lm @350mA, 6 bins	min. 320lm @350mA, 6 bins	min. 280lm @350mA, 6 bins	min. 240lm @350mA, 6 bins	min. 280lm @350mA, 6 bins	min. 280lm @350mA, 6 bins	min. 240lm @350mA, 6 bins	min. 240lm @350mA, 6 bins
Type	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E	MC-E
Color	5000 - 10000	5000 - 10000	4500 - 5300	3700 - 4500	4500 - 5300	4000 - 4750	2700 - 3000	2900 - 3200	2900 - 3500	2600 - 3000	3000 - 3700	2600 - 3000
Wavelength (nm)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Current (mA)	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700	350 - 700
Lens Type	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome
Viewing Angle (q)	110	110	110	110	110	110	110	110	110	110	110	110
Luminous Flux (lm)	430+	370+	370+	370+	320+	320+	280+	240+	280+	280+	240+	240+
Luminous Intensity (mcd)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1K Pcs. Ref. Price (USD)	13.000	11.350	12.500	12.400	10.900	10.900	11.500	10.210	10.900	11.750	10.610	10.780

High Power XPC/XPE LED

The XLamp XP-E LED combines the proven lighting-class performance and reliability of the XLamp XR-E LED in a package with 80% smaller footprint. The XLamp XP-E LED continues Cree's history of innovation in LEDs for lighting applications with wide viewing angle, symmetrical package, unlimited floor life and electrically neutral thermal path.



► FEATURES

- Proven lighting class performance
- Narrow color bins
- Smaller footprint 3.45 x 3.45
- Low thermal resistance (12C/ W)
- Wider viewing angle at 115/ 110 degree
- Same color bin as XR LED

► BENEFITS

- High intensity output and smaller size
- Low power consumption
- Less moisture sensitivity
- Smoother far field pattern
- Isolated thermal path

► APPLICATIONS

- Portable lighting
- Personal lighting
- Indoor lighting
- Commercial lighting
- Emergency vehicle lighting
- Signage

Supplier	Cree									
	Cool White				Neutral White		Warm White			
Part No.	XPEWHT-L1-0000-00C01	XPEWHT-L1-0000-00B01	XPCWHT-L1-0000-00A01	XPCWHT-L1-0000-00901	XPEWHT-L1-0000-009E4	XPEWHT-L1-0000-007E7	XPEWHT-L1-0000-009E7	XPCWHT-L1-0000-006E7	XPEWHT-L1-0000-008W6	
Technical Performance	min. 100lm @350mA, full bins	min. 93.9lm @350mA, full bins	min. 87.4lm @350mA, full bins	min. 80.6lm @350mA, full bins	min. 80.6lm @350mA, 4 bins	min. 67.2lm @350mA, 4 bins	min. 80.6lm @350mA, 4 bins	min. 62.2lm @350mA, 4 bins	min. 73.9lm @350mA, 12 bins	
Type	XP-E series	XP-E series	XP-C series	XP-C series	XP-E series	XP-E series	XP-E series	XP-C series	XP-E series	
Color	Cool white	Cool white	Cool white	Cool white	Neutral white	Warm white	Warm white	Warm white	Warm white	
Chromaticity Coordinates	5000 - 10000	5000 - 10000	5000 - 10000	5000 - 10000	4300 - 4750	4300 - 4750	4300 - 4750	4300 - 4750	2600 - 3700	
Wavelength (nm)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Current (mA)	350 - 700	350 - 700	350 - 500	350 - 500	350 - 700	350 - 700	350 - 700	350 - 500	350 - 700	
Lens Type	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	
Viewing Angle (q)	115	115	110	110	115	115	115	110	115	
Luminous Flux (lm)	100+	93.9+	87.4+	80.6+	80.6+	80.6+	80.6+	62.2+	73.9+	
Luminous Intensity (mcd)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1K Pcs. Ref. Price (USD)	2.600	2.400	1.900	1.700	2.500	2.500	2.650	1.750	2.300	