



A Solid-State Lighting Premium Expert

[www.edison-opto.com.tw](http://www.edison-opto.com.tw)

---

High Power LEDs

# Edixeon® Module Datasheet

Edixeon® modules are the most versatile solutions for the emerging solid state lighting. Edixeon® modules are designed to satisfy even the most demanding lighting application with high power LEDs, from LED lamps to sophisticated high profile lighting systems.

With completed circuit layout provided, customers can easily integrate these modules into their fixture designs. Besides the standard product lines, customization is also available for maximum flexibility.

## Features :

- Available in various size and shapes
- Circuit layout finished
- Compatible multiple lens are available
- Optimized for color mixing uniformity
- Easy installation design



A Solid-State Lighting Premium Expert

## Table of Contents

---

• Product Nomenclature.....	3
• Outline Dimensions.....	4
• Multi Color(3 in 1 Emitter) Series Characteristics.....	8
• Single Color Series Characteristics.....	8
• Cool White/Neutral White and Warm White Characteristics.....	9
• Forward Voltage Characteristics.....	10
• MCPCB Dimensions and Circuits.....	11
• Module Lens.....	12



A Solid-State Lighting Premium Expert

## Product Nomenclature

The following table describes the available color, power consumption, and lens type. For detailed flux and forward voltage information, please consult the Bin Group documentation.

E M P W - A11 1 1 1 A - 01 1 L  
 X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 X12

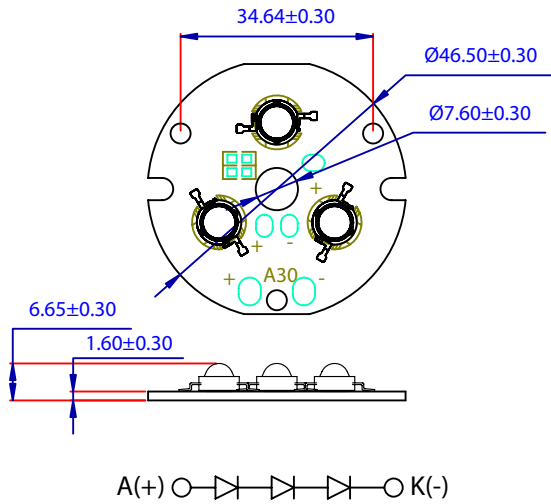
X1 LED Item		X2 Module		X3 Item		X4 Emitter Color	
Code	Type	Code	Type	Code	Type	Code	Type
E	Edixeon®	M	Module	P	Plane Module	W	Cool White
				L	Line Module	H	Neutral White
				R	Ring Module	X	Warm White
				C	Circle	R	Red
				PH	Plane with Heatsink	A	Amber
				LH	Line with Heatsink	T	True Green
				RH	Ring with Heatsink	B	Blue
						RTB	RGB 3 chips
						M	Muti Color

X5 AI PCB Dimension		X6 Lens Angle		X7 Housing Color		X8 Connector Dimension	
Code	Type	Code	Type	Code	Type	Code	Type
		0	None	0	None	0	None
		1	10	1	White	1	#AMP-179123-2
		2	15	2	Black	2	101*101*1.0
		3	30	3	Clear	3	#AMP-2-292173-2
		4	15/50			4	85mm(AWG24)
						5	UL1095#28
							AWG ZHR-2(JST)
						6	85mm(AWG22)

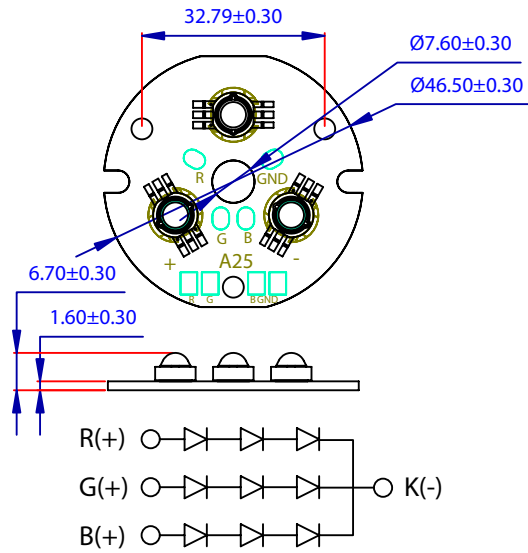
X9 Circuit Item		X10 Total Quantity		X11 Emitter Power		X12 Emitter Type	
Code	Type	Code	Type	Code	Type	Code	Type
A	Single	01	1 Emitter	1	1W	L	Lambertian
B	Parallel	02	2 Emitter	3	3W	B	Batwing
C	Serial	03	3 Emitter	5	5W	S	Side Emitting
D	2 Parallel with 3 Serial	...	...			F	Focusing
E	2 Parallel with 3 Serial					A	RC Lambertian
F	RGB Common Anode						
G	2 Parallel with 6 Serial						

## Outline Dimensions

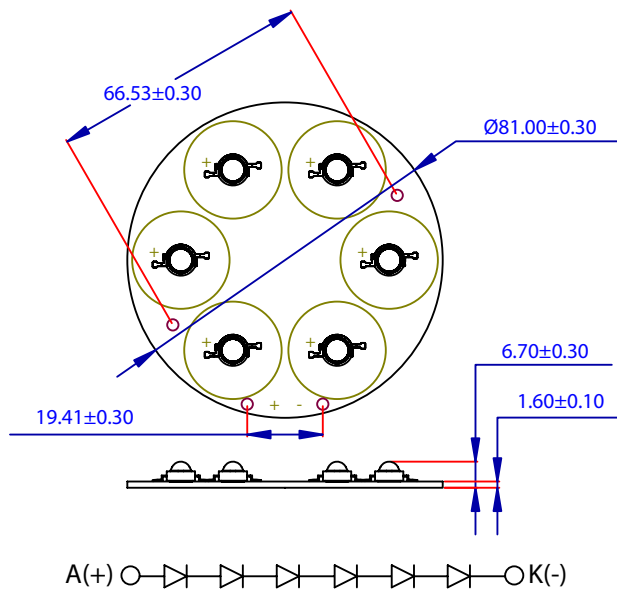
EMCx-A30000C-03xx



EMCRTB-A25000C-031x



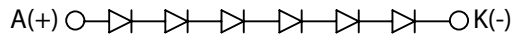
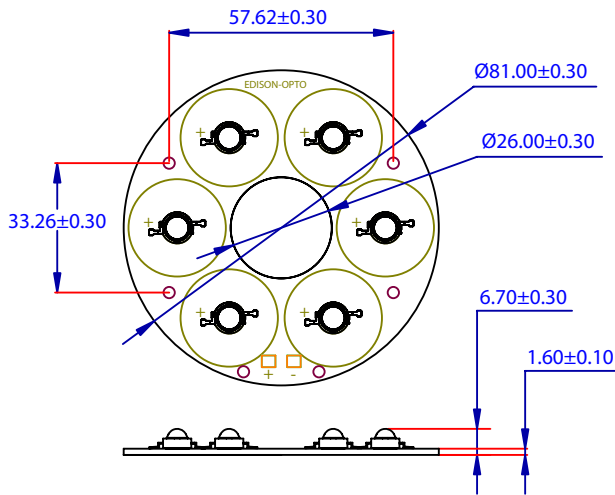
EMCx-A21000C-06xx



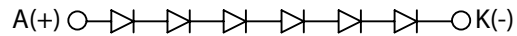
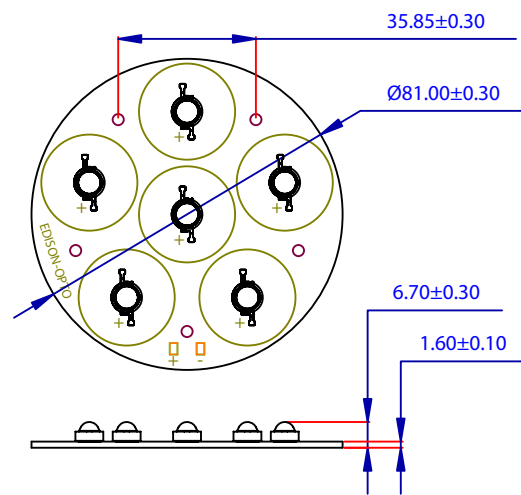
Notes:

1. All dimensions are in mm.
2. It is strongly recommended that the temperature of the leads do not exceed 55°C.

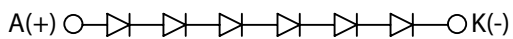
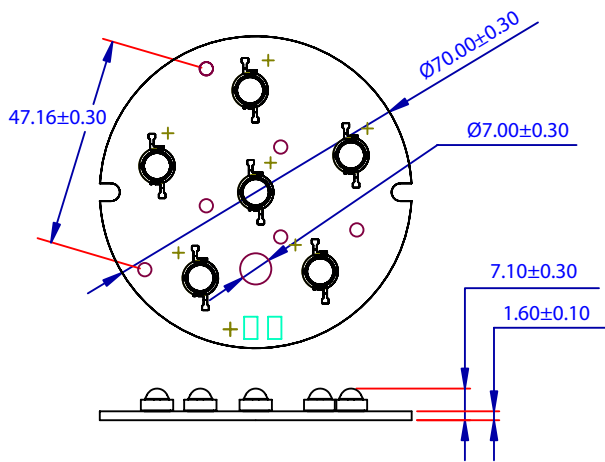
EMRx-A17000C-06xx



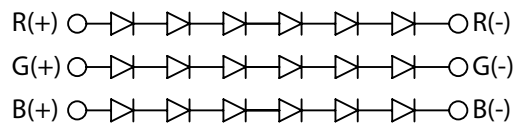
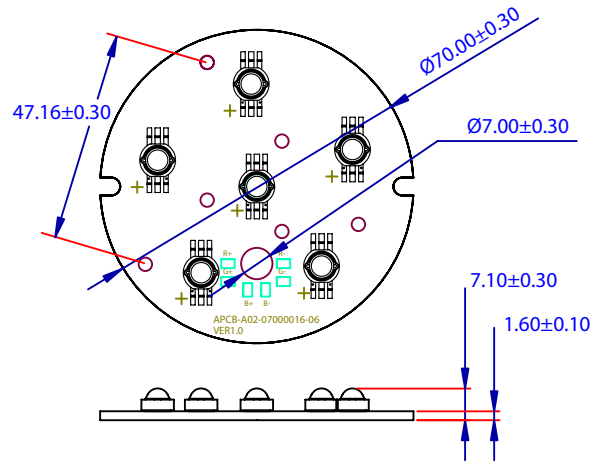
EMCx-A7000C-06xx



EMCx-A38000C-06xx



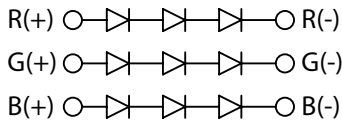
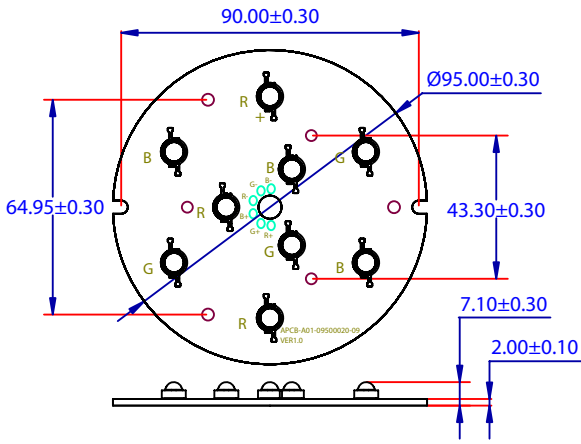
EMCRTB-A38000C-061x



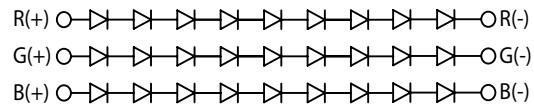
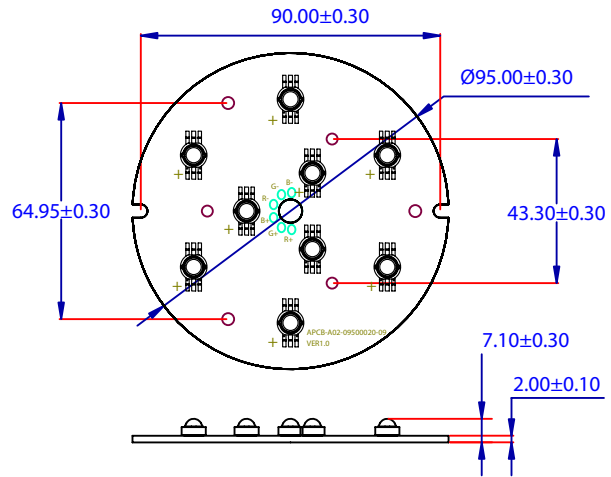
Notes:

1. All dimensions are in mm.
2. It is strongly recommended that the temperature of the leads do not exceed 55°C.

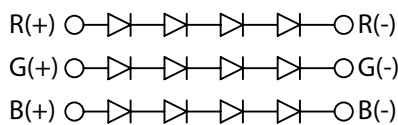
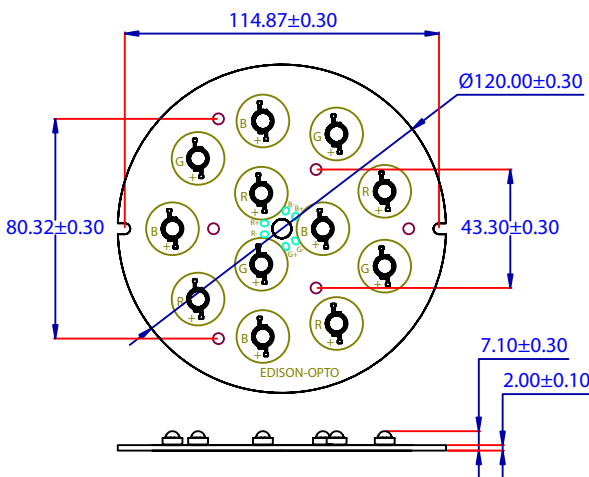
EMCx-A43000C-09xx



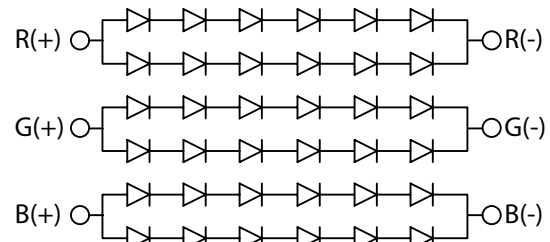
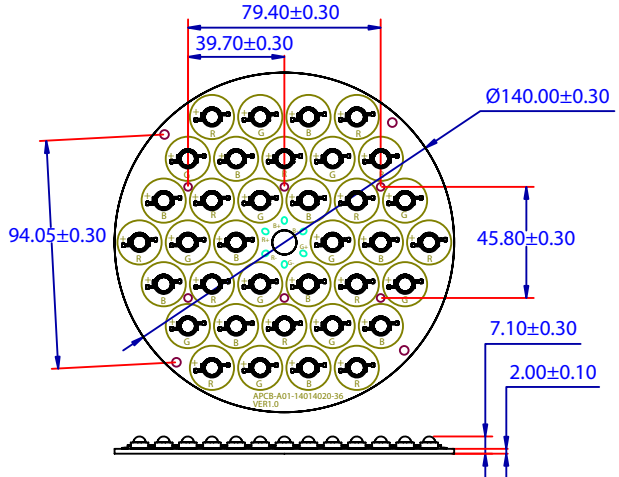
EMCR TB-A43000C-091x



EMCx-A45000C-12xx



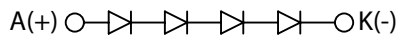
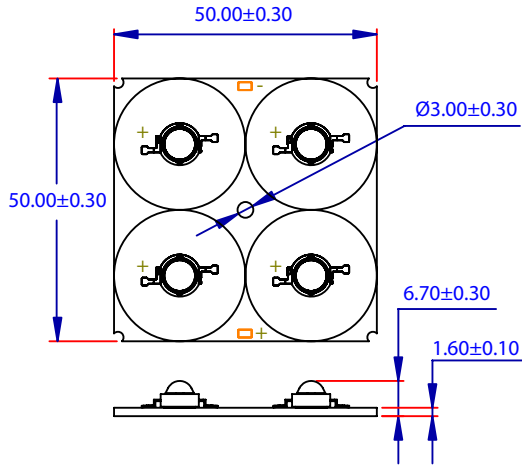
EMCx-A42000G-36xx



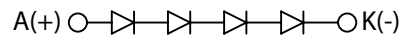
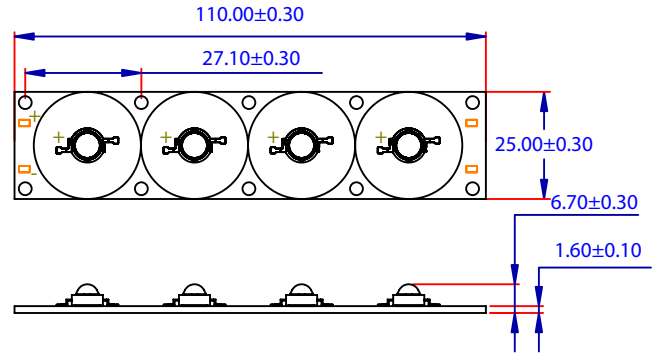
Notes:

- 1. All dimensions are in mm.
- 2. It is strongly recommended that the temperature of the leads do not exceed 55°C.

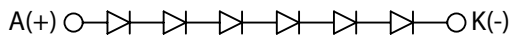
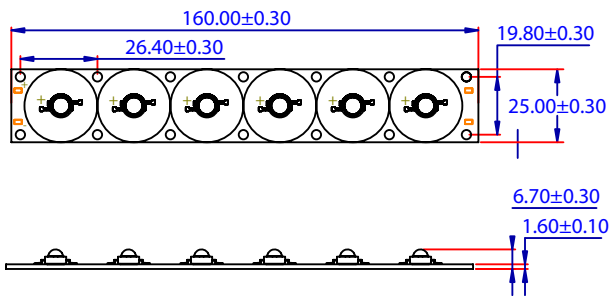
EMPx-A5000C-04xx



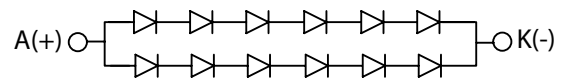
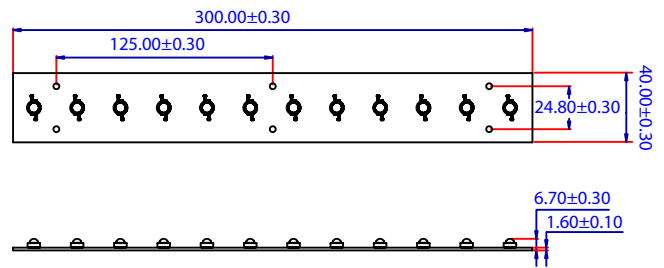
EMLx-A6000C-04xx



EMLx-A11000C-06xx



EMLx-A12000G-12xx



Notes:

1. All dimensions are in mm.
2. It is strongly recommended that the temperature of the leads do not exceed 55°C.

### Multi Color (3 in 1 Emitter) Series Characteristics at $T_j=25^{\circ}\text{C}$ :

Color EDERTB-1LA1	EMCRTB-A38000C-061x			EMCRTB-A43000C-091x			EMCRTB-A25000C-031x		
	$I_F=350\text{mA}$			$I_F=350\text{mA}$			$I_F=350\text{mA}$		
	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue
Total Flux(lm)	210	360	72	315	540	108	105	108	36
$\lambda d(\text{nm})(\text{Typ.})$	625	530	460	625	530	460	625	530	460
$V_F(\text{V})(\text{Min.})$	--	--	--	--	--	--	--	--	--
$V_F(\text{V})(\text{Typ.})$	14.4	21.6	20.4	21.6	32.4	30.6	7.2	10.8	10.2

Color EDERTB-1GA1	EMCRTB-A38000C-061x			EMCRTB-A43000C-091x			EMCRTB-A25000C-031x		
	$I_F=350\text{mA}$			$I_F=350\text{mA}$			$I_F=350\text{mA}$		
	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue
Total Flux(lm)	180	330	90	270	495	135	90	165	45
$\lambda d(\text{nm})(\text{Typ.})$	625	530	460	625	530	460	625	530	460
$V_F(\text{V})(\text{Min.})$	--	--	--	--	--	--	--	--	--
$V_F(\text{V})(\text{Typ.})$	14.4	21.6	20.4	21.6	32.4	30.6	7.2	10.8	10.2

Color EDERTB-1EA1	EMCRTB-A38000C-061x			EMCRTB-A43000C-091x			EMCRTB-A25000C-031x		
	$I_F=350\text{mA}$			$I_F=350\text{mA}$			$I_F=350\text{mA}$		
	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue
Total Flux(lm)	138	270	48	207	405	72	69	135	24
$\lambda d(\text{nm})(\text{Typ.})$	625	530	460	625	530	460	625	530	460
$V_F(\text{V})(\text{Min.})$	--	--	--	--	--	--	--	--	--
$V_F(\text{V})(\text{Typ.})$	14.4	21.6	20.4	21.6	32.4	30.6	7.2	10.8	10.2

### Single Color Series Characteristics at $T_j=25^{\circ}\text{C}$ :

Color Edixeon® Series	EMCx-A43000C-09xx			EMCx-A45000C-12xx			EMCx-A42000C-36xx		
	$I_F=350\text{mA}$			$I_F=350\text{mA}$			$I_F=700\text{mA}$		
	Red	Green	Blue	Red	Green	Blue	Red	Green	Blue
Total Flux(lm)	135	210	60	180	280	80	540	840	240
$\lambda d(\text{nm})(\text{Typ.})$	625	525	465	625	525	465	625	525	465
$V_F(\text{V})(\text{Min.})$	6.0	8.4	9.3	8.0	11.2	12.4	12.0	16.8	18.6
$V_F(\text{V})(\text{Typ.})$	9.0	12.0	12.9	12.0	16.0	17.2	18.0	24.0	25.8



### Cool White/Neutral White and Warm White Characteristics at $T_j=25^{\circ}\text{C}$ :

Color	EMCx-A3000C-03xx		EMCx-A2100C-06xx		EMRx-A1700C-06xx	
	$I_f=350\text{mA}$		$I_f=350\text{mA}$		$I_f=350\text{mA}$	
	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)
Cool White(KLC8)	255	6,500	510	6,500	510	6,500
Cool White(1LA5)	285	6,500	570	6,500	570	6,500
Neutral White(KLC8)	210	4,100	480	4,100	480	4,100
Neutral White(1LA5)	225	4,100	450	4,100	450	4,100
Warm White(KLC8)	180	3,100	360	3,100	360	3,100
Warm White(1LA5)	195	3,100	390	3,100	390	3,100
Color	EMCx-A7000C-06xx		EMCx-A3800C-06xx		EMCx-A4300C-09xx	
	$I_f=350\text{mA}$		$I_f=350\text{mA}$		$I_f=350\text{mA}$	
	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)
Cool White(KLC8)	510	6,500	510	6,500	765	6,500
Cool White(1LA5)	570	6,500	570	6,500	855	6,500
Neutral White(KLC8)	480	4,100	480	4,100	630	4,100
Neutral White(1LA5)	450	4,100	450	4,100	675	4,100
Warm White(KLC8)	360	3,100	360	3,100	480	3,100
Warm White(1LA5)	390	3,100	390	3,100	585	3,100
Color	EMCx-A4500C-12xx		EMCx-A4200C-36xx		EMLx-A1100C-06xx	
	$I_f=350\text{mA}$		$I_f=700\text{mA}$		$I_f=350\text{mA}$	
	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)
Cool White(KLC8)	1,020	6,500	3,060	6,500	510	6,500
Cool White(1LA5)	1,140	6,500	3,420	6,500	570	6,500
Neutral White(KLC8)	840	4,100	2,520	4,100	480	4,100
Neutral White(1LA5)	900	4,100	2,700	4,100	450	4,100
Warm White(KLC8)	720	3,100	2,160	3,100	360	3,100
Warm White(1LA5)	780	3,100	2,340	3,100	390	3,100
Color	EMLx-A1200G-12xx		EMPx-A500C-04xx		EMLx-A600C-04xx	
	$I_f=700\text{mA}$		$I_f=350\text{mA}$		$I_f=350\text{mA}$	
	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)	Total Flux(lm) (Typ.)	CCT(K) (Typ.)
Cool White(KLC8)	1,020	6,500	340	6,500	340	6,500
Cool White(1LA5)	1,140	6,500	380	6,500	380	6,500
Neutral White(KLC8)	840	4,100	280	4,100	280	4,100
Neutral White(1LA5)	900	4,100	300	4,100	300	4,100
Warm White(KLC8)	720	3,100	240	3,100	240	3,100
Warm White(1LA5)	780	3,100	260	3,100	260	3,100

Note: The listed lumen values are based on individual LED emitters. The total lumen output of modules may vary due to different configurations.

### Forward Voltage Characteristics at $T_j=25^\circ\text{C}$ :

Color	EMCx-A30000C-03xx		EMCx-A21000C-06xx		EMRx-A17000C-06xx	
	$I_F=350\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$
Cool White(KLC8)	9.3	11.1	18.6	22.2	18.6	22.2
Cool White(1LA5)	9.3	11.1	18.6	22.2	18.6	22.2
Neutral White(KLC8)	9.3	11.1	18.6	22.2	18.6	22.2
Neutral White(1LA5)	9.3	11.1	18.6	22.2	18.6	22.2
Warm White(KLC8)	9.3	11.1	18.6	22.2	18.6	22.2
Warm White(1LA5)	9.3	11.1	18.6	22.2	18.6	22.2

Color	EMCx-A7000C-06xx		EMCx-A38000C-06xx		EMCx-A43000C-09xx	
	$I_F=350\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$
Cool White(KLC8)	18.6	22.2	18.6	22.2	9.3	11.1
Cool White(1LA5)	18.6	22.2	18.6	22.2	9.3	11.1
Neutral White(KLC8)	18.6	22.2	18.6	22.2	9.3	11.1
Neutral White(1LA5)	18.6	22.2	18.6	22.2	9.3	11.1
Warm White(KLC8)	18.6	22.2	18.6	22.2	9.3	11.1
Warm White(1LA5)	18.6	22.2	18.6	22.2	9.3	11.1

Color	EMCx-A45000C-12xx		EMCx-A42000C-36xx		EMLx-A11000C-06xx	
	$I_F=350\text{mA}$		$I_F=700\text{mA}$		$I_F=350\text{mA}$	
	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$
Cool White(KLC8)	12.4	14.8	18.6	22.2	18.6	22.2
Cool White(1LA5)	12.4	14.8	18.6	22.2	18.6	22.2
Neutral White(KLC8)	12.4	14.8	18.6	22.2	18.6	22.2
Neutral White(1LA5)	12.4	14.8	18.6	22.2	18.6	22.2
Warm White(KLC8)	12.4	14.8	18.6	22.2	18.6	22.2
Warm White(1LA5)	12.4	14.8	18.6	22.2	18.6	22.2

Color	EMLx-A12000G-12xx		EMPx-A5000C-04xx		EMLx-A6000C-04xx	
	$I_F=700\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$	$V_F(\text{V})(\text{Min.})$	$V_F(\text{V})(\text{Max.})$
Cool White(KLC8)	18.6	22.2	12.4	14.8	12.4	14.8
Cool White(1LA5)	18.6	22.2	12.4	14.8	12.4	14.8
Neutral White(KLC8)	18.6	22.2	12.4	14.8	12.4	14.8
Neutral White(1LA5)	18.6	22.2	12.4	14.8	12.4	14.8
Warm White(KLC8)	18.6	22.2	12.4	14.8	12.4	14.8
Warm White(1LA5)	18.6	22.2	12.4	14.8	12.4	14.8



A Solid-State Lighting Premium Expert

## MCPCB Dimensions and Circuits

Module Part No.	Dimension(mm)	Circuit
EMCRTB-A25000C-031x	Ø46.5*1.6	3 Series
EMCx-A30000C-03xx	Ø46.5*1.6	3 Series
EMCx-A21000C-06xx	Ø81*1.6	6 Series
EMRx-A17000C-06xx	Ø81*1.6	6 Series
EMCx-A7000C-06xx	Ø81*1.6	6 Series
EMCx-A38000C-06xx	Ø70*2.0	6 Series
EMCRTB-A38000C-061x	Ø70*2.0	6 Series
EMCx-A43000C-09xx	Ø95*2.0	3 Series 3 Parallel or 9 Series
EMCRTB-A43000C-091x	Ø95*2.0	9 Series
EMCx-A45000C-12xx	Ø120*2.0	4 Series 3 Parallel or 12 Series
EMCx-A42000G-36xx	Ø140*2.0	6 Series 6 Parallel
EMPx-A5000C-04xx	W50*H50*1.6	4 Series
EMLx-A6000C-04xx	W110*H25*1.6	4 Series
EMLx-A11000C-06xx	W160*H25*1.6	6 Series
EMLx-A12000G-12xx	W300*H40*1.6	6 Series 2 Parallel



A Solid-State Lighting Premium Expert

## Module Lens

Module Part No.	Lens Part No.	Angle
EMCRTB-A25000C-031x	EDOL-AE30-L1	30°
	EDOL-AE45-L1	45°
	EDOL-AE60-L1	60°
EMCx-A30000C-03xx	EDOL-AC30-M11	30°
	EDOL-AC45-M15	45°
	EDOL-AC60-M15	60°
EMCx-A38000C-06xx	EDOL-AF25-L1	25°
	EDOL-AF40-L1	40°
EMCx-A43000C-09xx	EDOL-AG25-L1	25°
EMCx-A42000C-36xx	EDOL-AH25-L1	25°
	EDOL-AH45-L1	45°

Notes:

1. Keep the MCPCB below 55°C under free convection system for optimal performance and reliability result.
2. It is important that the thermal disipation design utilizes either heatsink/heatplate or heat pipe for reliable performance.