

Edixeon[®] MCPCB

Approved By Customer	Designer	Checker	Approval

Date : 2006/11/11

Version : 2.1

Device No. : 3-RD-01-E0016
EDISON OPTO CORPORATION

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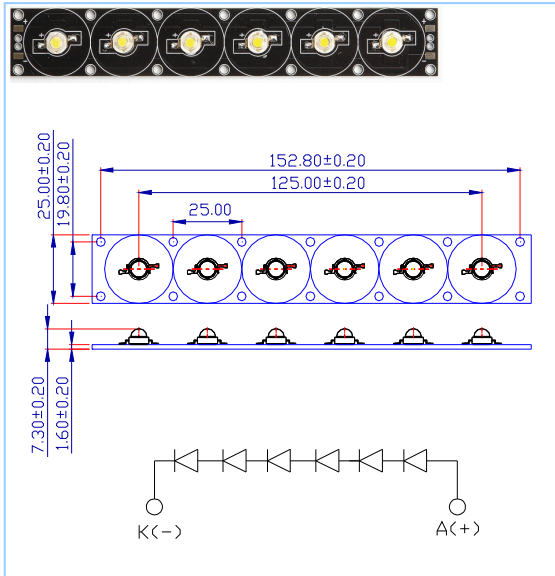
Fax: 886-2-8227-6997

<http://www.edison-opto.com.tw>

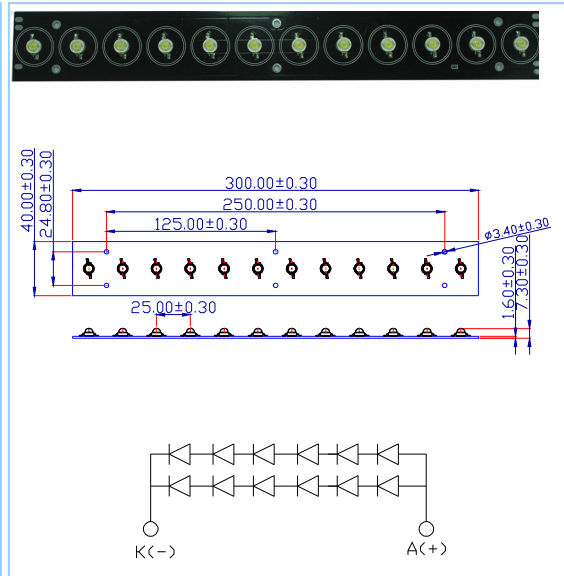


Package Outlines

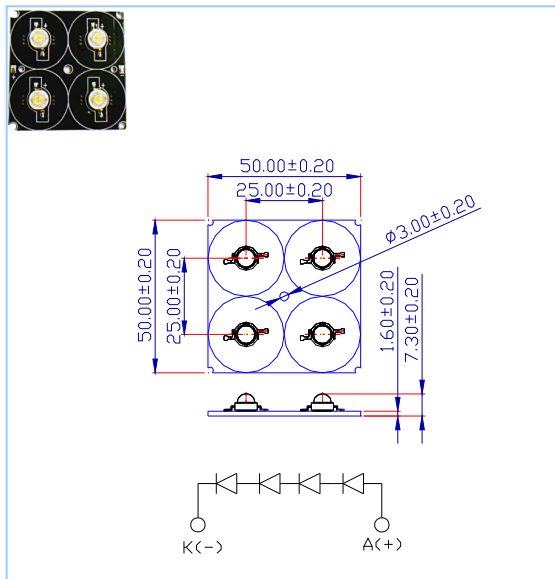
EMLx-A11000C-061x



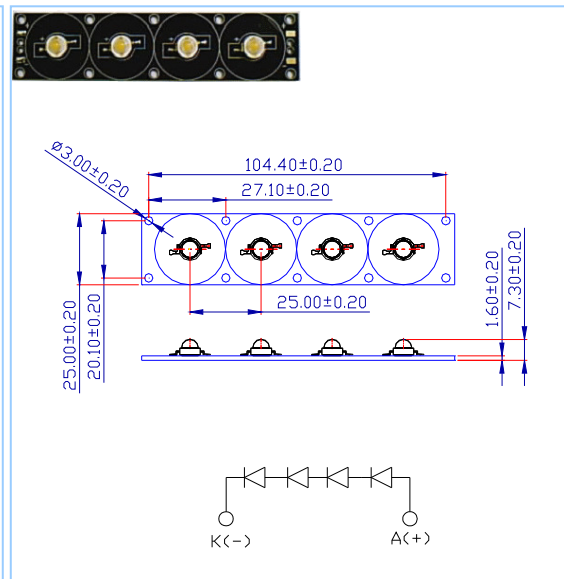
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EMPx-A5000C-041x



EMLx-A6000C-041x

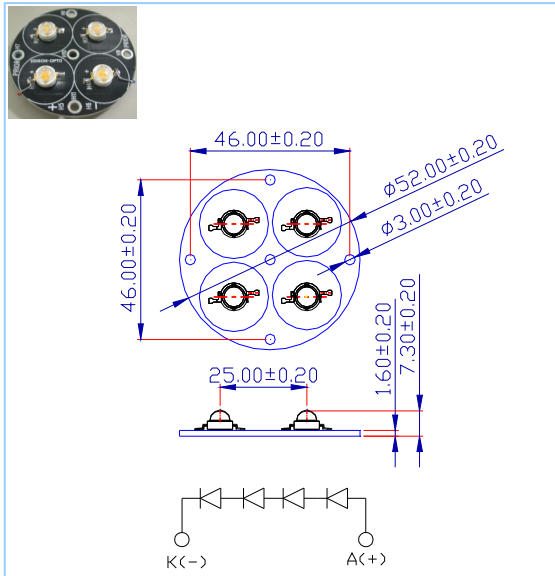


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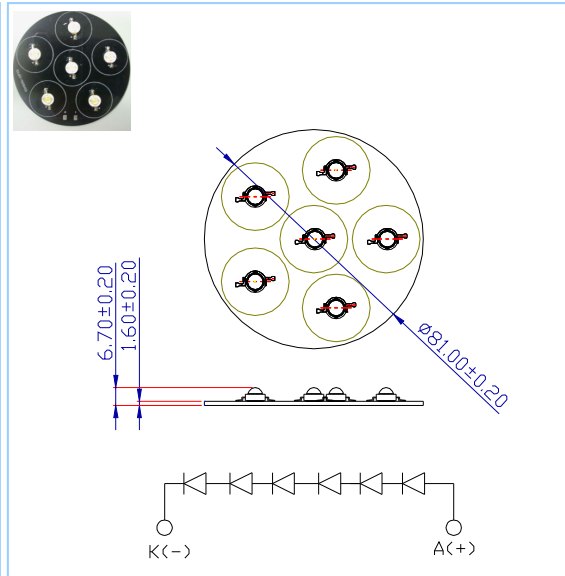
1. All dimensions are in mm.
2. Drawings are not to scale.
3. It is strongly recommended that the temperature of lead be not higher than 60°C.

Package Outlines

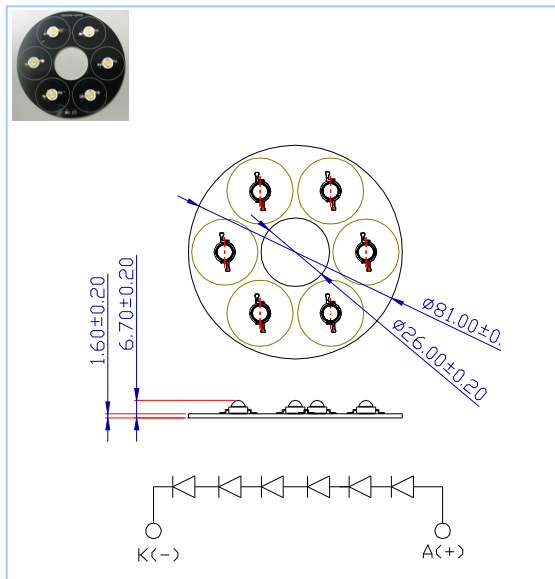
EMCx-A13000C-041x



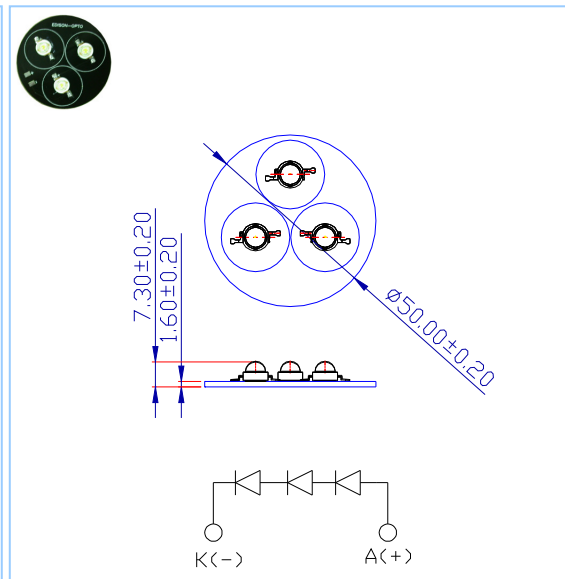
EMCx-A7000C-061x



EMRx-A7000C-061x



EMCx-A8000C-031x

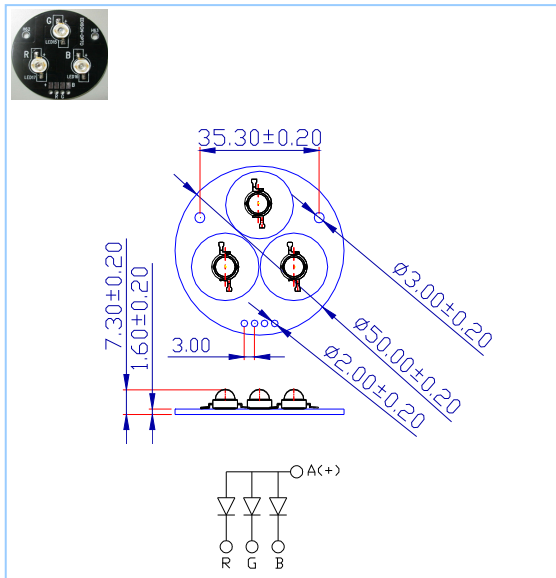


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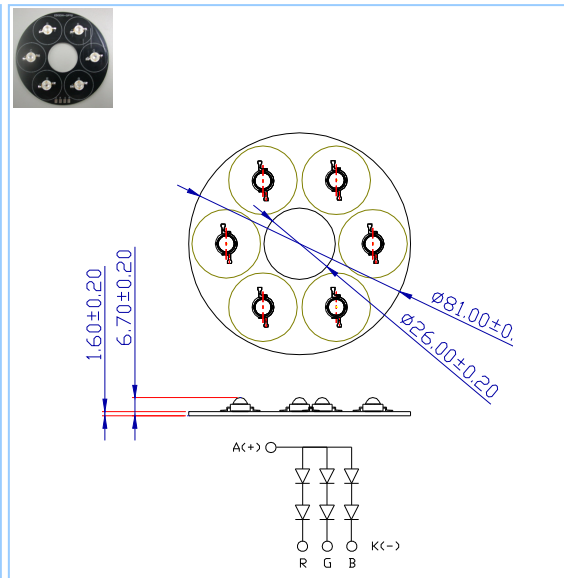
1. All dimensions are in mm.
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Package Outlines

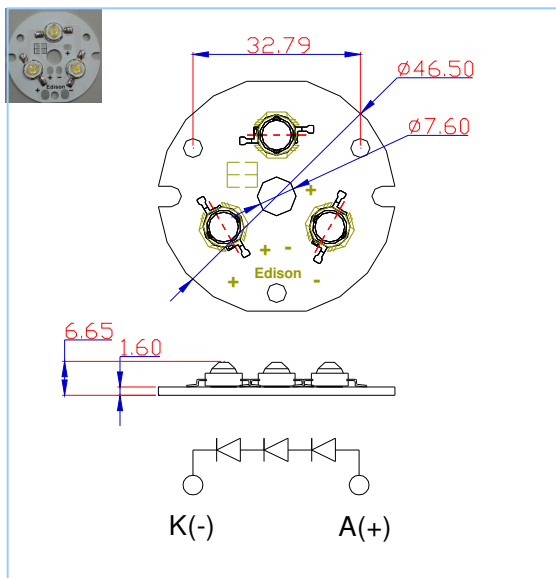
EMCRTB-A8000F-031x



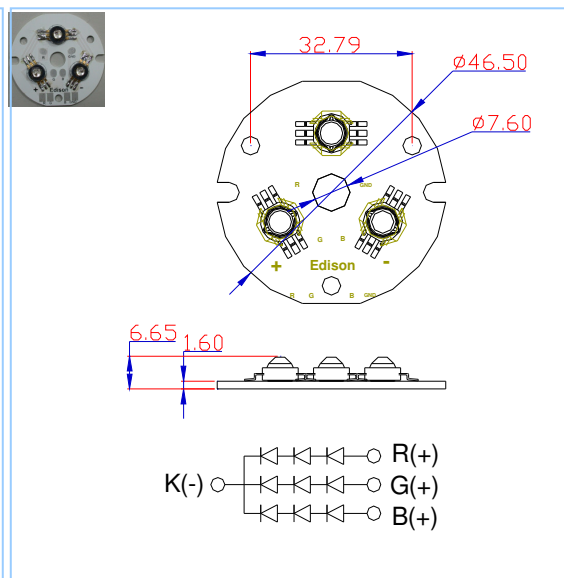
EMRRTB-A7000C-061x



EMCx-A25000C-031x



EMCRTB-A25000C-031x

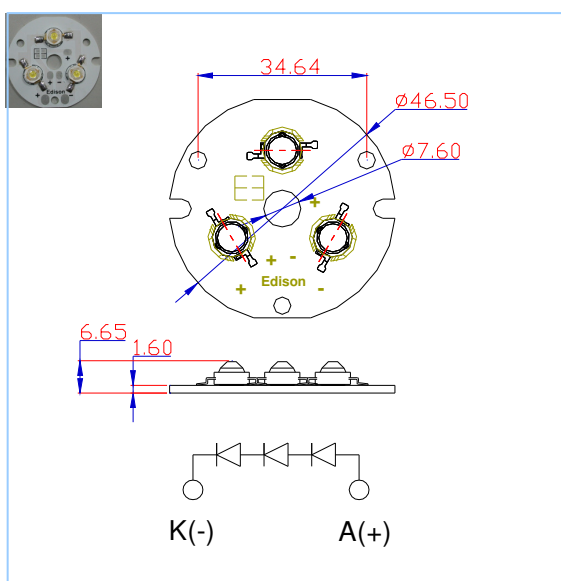


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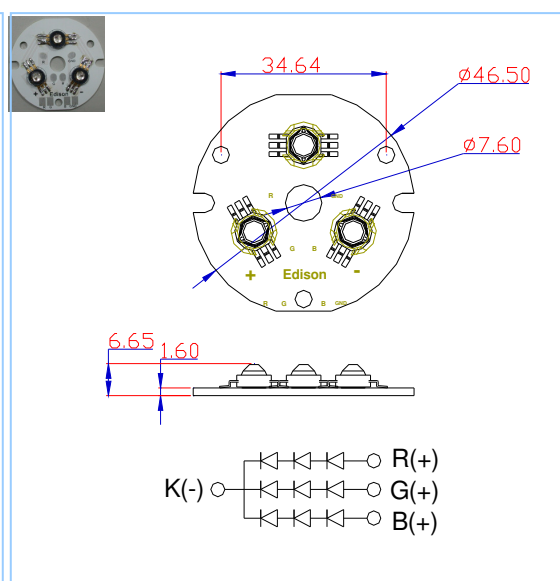
1. All dimensions are in mm.
2. Drawings are not to scale.
3. It is strongly recommended that the temperature of lead be not higher than 60°C .

Package Outlines

EMCx-A30000C-031x



EMCRTB-A30000C-031x



Notes:

4. All dimensions are in mm.
5. Drawings are not to scale.
6. It is strongly recommended that the temperature of lead be not higher than 60°C.

Multi color series Characteristics at $T_J=25^\circ\text{C}$:

Color	EMCRTB-A8000F-031x		EMRRTB-A7000C-061x		EMCRTB-A25000C-031x	
	$I_F=350\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	Total Flux(lm)	$\lambda_d(\text{nm})$	Total Flux(lm)	$\lambda_d(\text{nm})$	Total Flux(lm)	$\lambda_d(\text{nm})$
	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
Red	40.0	625.0	80.0	625.0	120.0	625.0
True Green	50.0	525.0	100.0	525.0	150.0	525.0
Blue	16.0	470.0	32.0	470.0	48.0	470.0
	$V_F(\text{V})$		$V_F(\text{V})$		$V_F(\text{V})$	
	Min.	Max.	Min.	Max.	Min.	Max.
Red	2.0	3.0	4.0	6.0	6.0	9.0
True Green	2.8	4.0	5.6	8.0	8.4	12.9
Blue	3.1	4.3	6.2	8.6	9.3	12.9

Color	EMCRTB-A30000C-031x	
	$I_F=350mA$	
	Total Flux(lm)	$\lambda_d(nm)$
	Typ.	Typ.
Red	120.0	625.0
True Green	150.0	525.0
Blue	48.0	470.0
	$V_F(V)$	
	Min.	Max.
	Red	6.0
True Green	8.4	12.9
Blue	9.3	12.9

Forward Current Characteristics at $T_J=25^{\circ}\text{C}$:

Color	$V_F(\text{V})$					
	EMLx-A11000C-061x		EMLx-A12000C-121x		EMPx-A5000C-041x	
	$I_F=350\text{mA}$		$I_F=700\text{mA}$		$I_F=350\text{mA}$	
	Min.	Max.	Min.	Max.	Min.	Max.
White	18.6	25.8	18.6	25.8	12.4	17.2
Warm White	18.6	25.8	18.6	25.8	12.4	17.2
Red	12.0	18.0	12.0	18.0	8.0	12.0
Red Orange	12.0	18.0	12.0	18.0	8.0	12.0
Amber	12.0	18.0	12.0	18.0	8.0	12.0
True Green	16.8	24.0	16.8	24.0	11.2	16.0
Blue	18.6	25.8	18.6	25.8	12.4	17.2
Color	$V_F(\text{V})$					
	EMLx-A6000C-041x		EMCx-A13000C-041x		EMCx-A7000C-061x	
	$I_F=350\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	Min.	Max.	Min.	Max.	Min.	Max.
White	12.4	17.2	12.4	17.2	18.6	25.8
Warm White	12.4	17.2	12.4	17.2	18.6	25.8
Red	8.0	12.0	8.0	12.0	12.0	18.0
Red Orange	8.0	12.0	8.0	12.0	12.0	18.0
Amber	8.0	12.0	8.0	12.0	12.0	18.0
True Green	11.2	16.0	11.2	16.0	16.8	24.0
Blue	12.4	17.2	12.4	17.2	18.6	25.8
Color	$V_F(\text{V})$					
	EMRx-A7000C-061x		EMCx-A8000C-031x		EMCx-A25000C-031x	
	$I_F=350\text{mA}$		$I_F=350\text{mA}$		$I_F=350\text{mA}$	
	Min.	Max.	Min.	Max.	Min.	Max.
White	18.6	25.8	9.3	12.9	9.3	12.9
Warm White	18.6	25.8	9.3	12.9	9.3	12.9
Red	12.0	18.0	6.0	9.0	6.0	9.0
Red Orange	12.0	18.0	6.0	9.0	6.0	9.0
Amber	12.0	18.0	6.0	9.0	6.0	9.0
True Green	16.8	24.0	8.4	12.0	8.4	12.0
Blue	18.6	25.8	9.3	12.9	9.3	12.9





Color	V _F (V)	
	EMCx-A30000C-031x	
	I _F =350mA	
	Min.	Max.
White	9.3	12.9
Warm White	9.3	12.9
Red	6.0	9.0
Red Orange	6.0	9.0
Amber	6.0	9.0
True Green	8.4	12.0
Blue	9.3	12.9







CCT and Color Characteristics at T_J=25°C :

Color	EMLx-A11000C-061x		EMLx-A12000C-121x		EMPx-A5000C-041x	
	I _F =350mA		I _F =700mA		I _F =350mA	
	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd
	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
White	300.0	6500K	600.0	6500K	200.0	6500K
Warm White	210.0	3100K	420.0	3100K	140.0	3100K
Red	240.0	625.0	480.0	625.0	160.0	625.0
Red Orange	270.0	617.0	540.0	617.0	180.0	617.0
Amber	240.0	590.0	480.0	590.0	160.0	590.0
True Green	300.0	525.0	600.0	525.0	200.0	525.0
Blue	96.0	470.0	192.0	470.0	64.0	470.0
Color	EMLx-A6000C-041x		EMCx-A13000C-041x		EMCx-A7000C-061x	
	I _F =350mA		I _F =350mA		I _F =350mA	
	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd
	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
White	200.0	6500K	200.0	6500K	300.0	6500K
Warm White	140.0	3100K	140.0	3100K	210.0	3100K
Red	160.0	625.0	160.0	625.0	240.0	625.0
Red Orange	180.0	617.0	180.0	617.0	270.0	617.0
Amber	160.0	590.0	160.0	590.0	240.0	590.0
True Green	200.0	525.0	200.0	525.0	300.0	525.0
Blue	64.0	470.0	64.0	470.0	96.0	470.0

Color	EMRx-A7000C-061x		EMCx-A8000C-031x		EMCx-A25000C-031x	
	$I_F=350mA$		$I_F=350mA$		$I_F=350mA$	
	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd	Total Flux(lm)	CCT/λd
	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.
White	300.0	6500K	150.0	6500K	150.0	6500K
Warm White	210.0	3100K	105.0	3100K	105.0	3100K
Red	240.0	625.0	120.0	625.0	120.0	625.0
Red Orange	270.0	617.0	135.0	617.0	135.0	617.0
Amber	240.0	590.0	120.0	590.0	120.0	590.0
True Green	300.0	525.0	150.0	525.0	150.0	525.0
Blue	96.0	470.0	48.0	470.0	48.0	470.0
Color	EMCx-A30000C-031x					
	$I_F=350mA$					
	Total Flux(lm)	CCT/λd				
	Typ.	Typ.				
White	150.0	6500K				
Warm White	105.0	3100K				
Red	120.0	625.0				
Red Orange	135.0	617.0				
Amber	120.0	590.0				
True Green	150.0	525.0				
Blue	48.0	470.0				

Thermal Characteristics at Ta=25°C

Module Part No.	Dimension (mm)	EDEW-1LA1 V _F (V)	T _b (°C)*1	Picture
EMLx-A11000C-061x	160*25*1.6	3.7	75	
EMLx-A12000C-121x	300*40*1.6	3.7	60	
EMPx-A5000C-041x	50*50*1.6	3.7	80	
EMLx-A6000C-041x	110*25*1.6	3.7	75	

EMCx-A13000C-041x	52*1.6	3.7	85	
EMCx-A7000C-061x	81*1.6	3.7	65	
EMRx-A7000C-061x	81*25*1.6	3.7	70	
EMCx-A8000C-031x	50*1.6	3.7	77	
EMCx-A25000C-031x	46.5*1.6	3.7	79	
EMCx-A30000C-031x	46.5*1.6	3.7	79	

Note:

1. T_b =Temperature of MCPCB after 20 minutes.

Suggestions:

1. The optimized temperature of MCPCB is below 60°C when operating Module under Free Convection.
2. The key point of thermal solution must do thermal dissipation design like using heat sink 、 heat plate or heat pipe closely matched with MCPCB.