MCPCB Modules

Edixeon® MCPCB

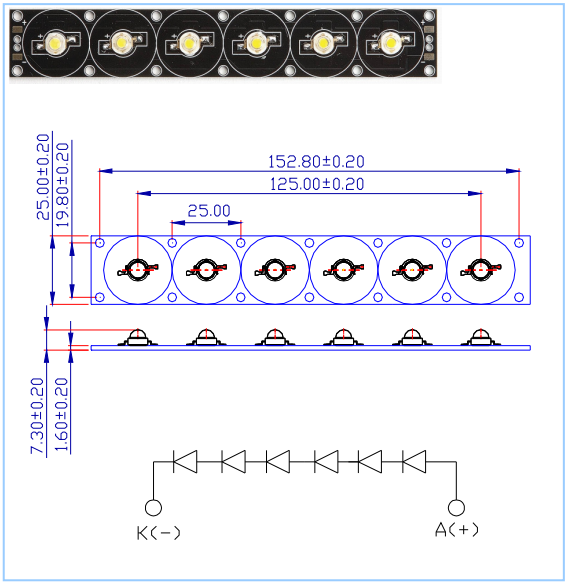
Approved By Customer	Designer	Checker	Approval

Date：2006/11/11
Version：2.1
Device No. : 3-RD-01-E0016

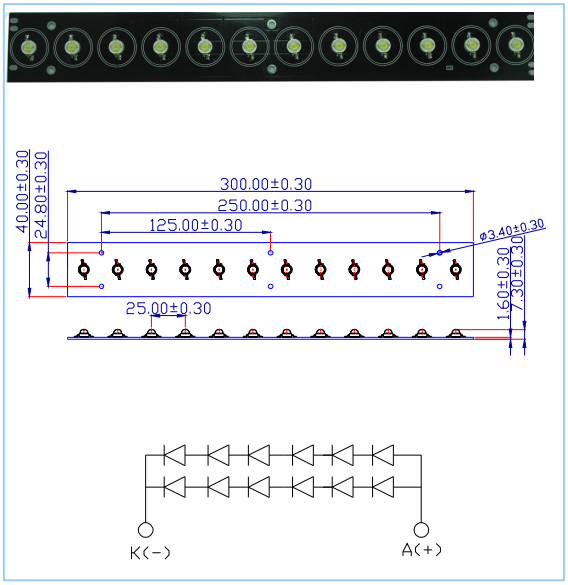
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Package Outlines

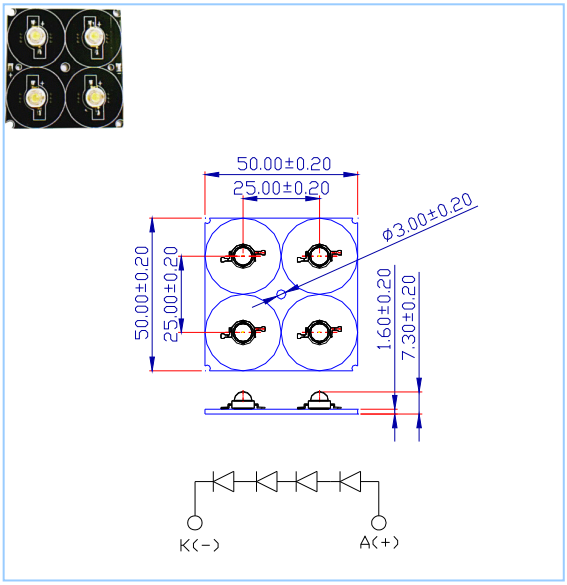
EMLx-A11000C-061x



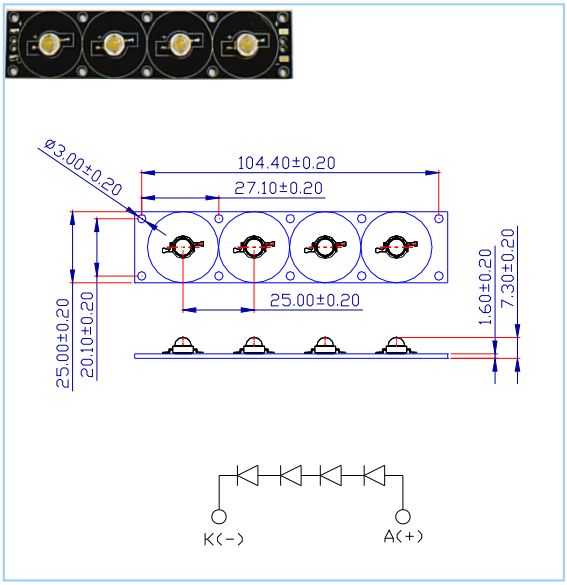
EMLx-A12000C-121x



EMPx-A5000C-041x



EMLx-A6000C-041x

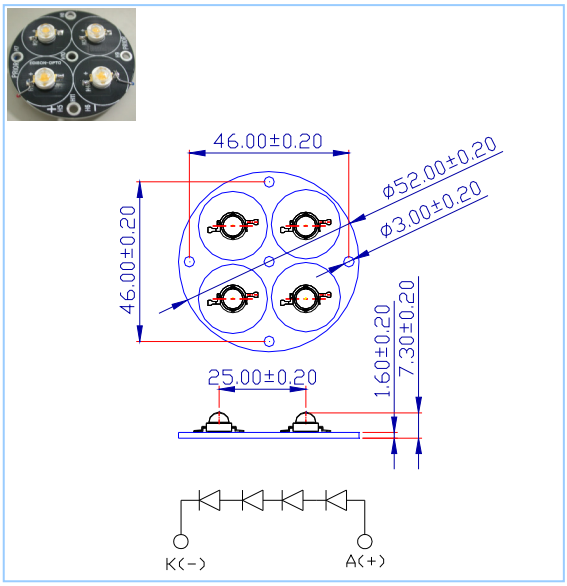


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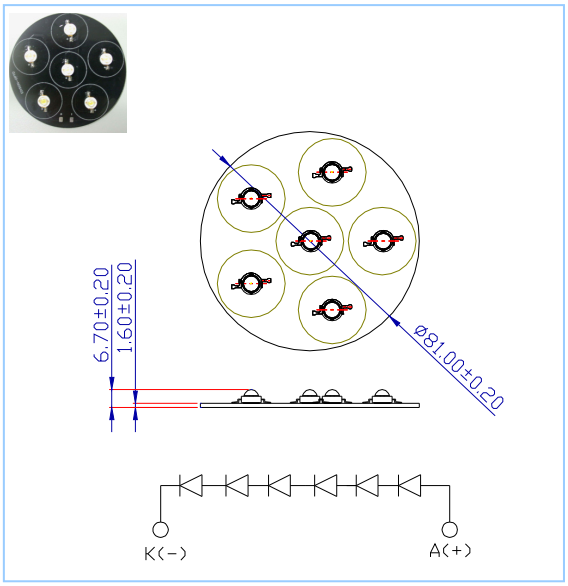
1. All dimensions are in mm.
2. Drawings are not to scale.
3. It is strongly recommended that the temperature of lead be not higher than 60℃.

Package Outlines

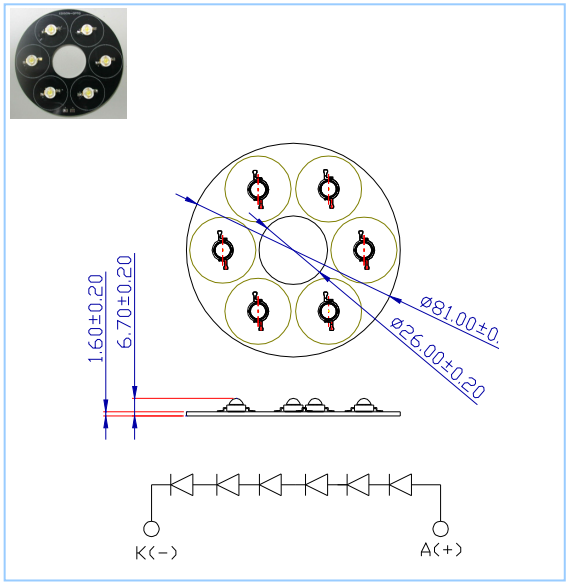
EMCx-A13000C-041x



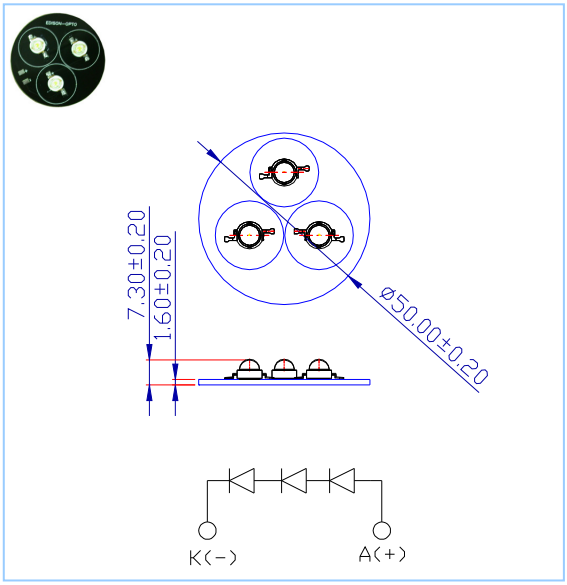
EMCx-A7000C-061x



EMRx-A7000C-061x



EMCx-A8000C-031x

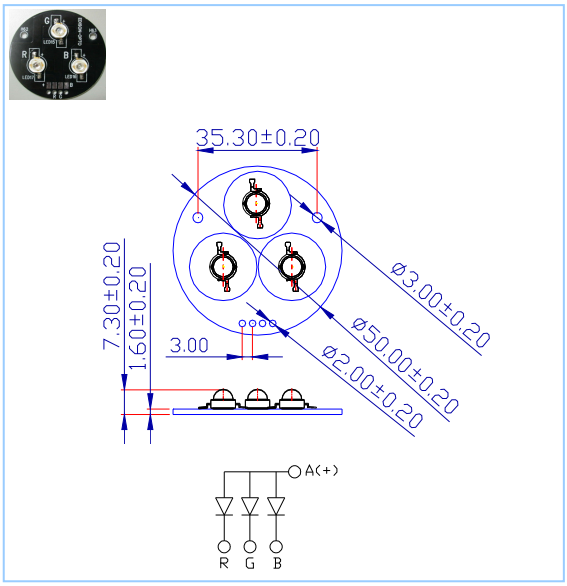


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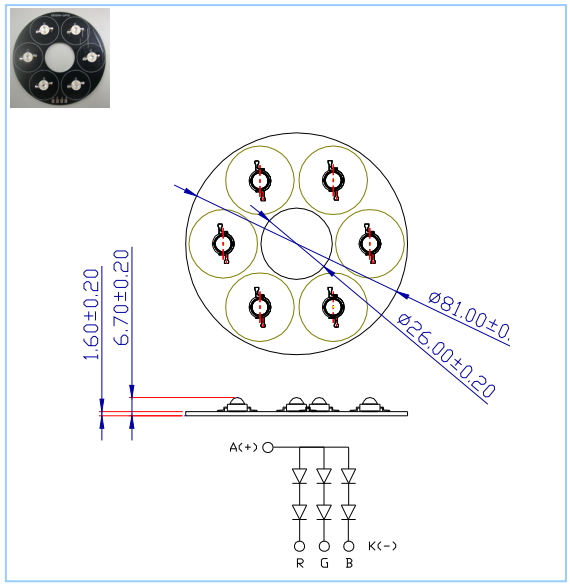
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Package Outlines

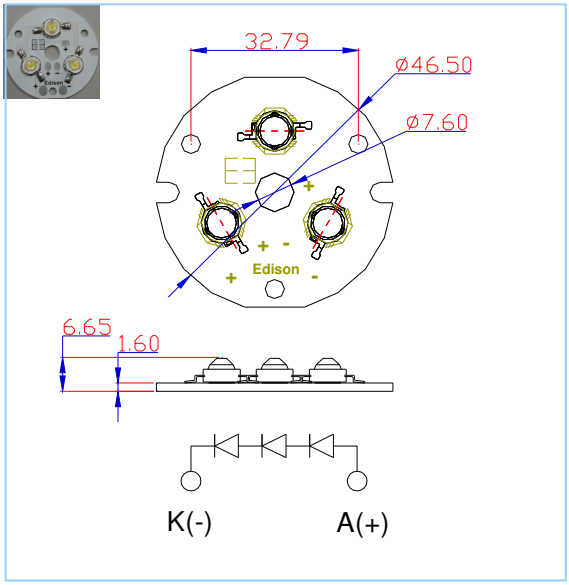
EMCRTB-A8000F-031x



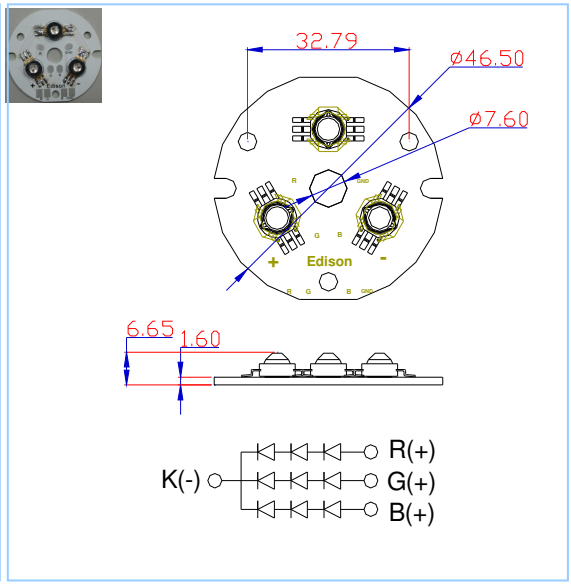
EMRRTB-A7000C-061x



EMCx-A25000C-031x



EMCRTB-A25000C-031x

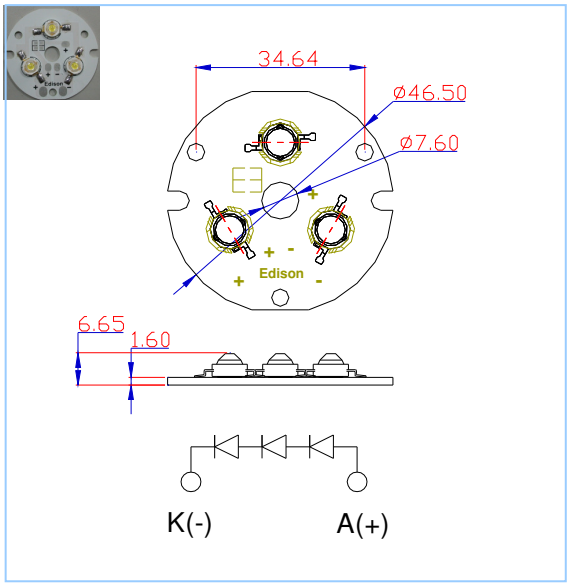


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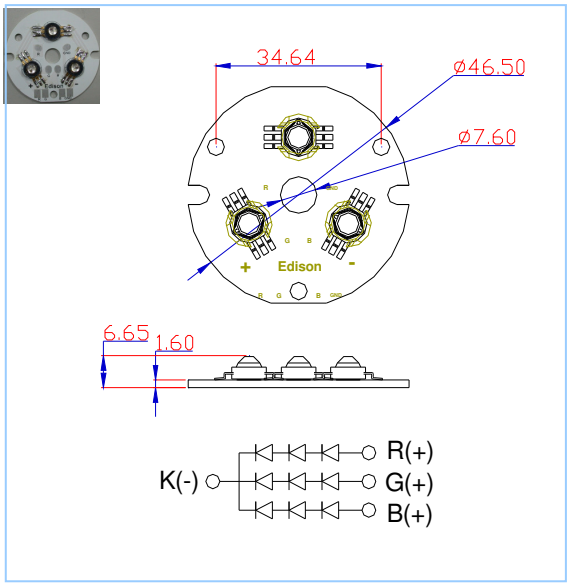
1. All dimensions are in mm.
2. Drawings are not to scale.
3. It is strongly recommended that the temperature of lead be not higher than 60℃.

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℃.

Multi color series Characteristics at T_J=25℃:

Color	EMCRTB-A8000F-031x		EMRRTB-A7000C-061x		EMCRTB-A25000C-031x	
	I_F=350mA		I_F=350mA		I_F=350mA	
	Total Flux(lm)	λd(nm)	Total Flux(lm)	λd(nm)	Total Flux(lm)	λd(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(V)		V_F(V)		V_F(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)	λd(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*	*9.0*
True Green	*8.4*	*12.9*
Blue	*9.3*	*12.9*

Forward Current Characteristics at T_J=25℃:

Color	V_F(V)					
	EMLx-A11000C-061x		EMLx-A12000C-121x		EMPx-A5000C-041x	
	I_F=350mA		I_F=700mA		I_F=350mA	
	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(V)					
	EMLx-A6000C-041x		EMCx-A13000C-041x		EMCx-A7000C-061x	
	I_F=350mA		I_F=350mA		I_F=350mA	
	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(V)					
	EMRx-A7000C-061x		EMCx-A8000C-031x		EMCx-A25000C-031x	
	I_F=350mA		I_F=350mA		I_F=350mA	
	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℃:

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℃

Module Part No.	Dimension (mm)	EDEW-1LA1 V_F(V)	T_b(℃)*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℃ 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.