



Features

- Long operating life (up to 100,000 hours)
- More Energy Efficient than incandescent and most halogen lamps
- Low forward voltage operated
- Instant light (Less than 100 ns)
- No UV
- High ESD protection.(More than 8kV).

Typical Applications

- Reading lights
- Uplighters and Downlighters
- Bollards / Security / Garden lighting
- Indoor and Outdoor Commercial lighting
- LCD Backlights / Light guides
- General lighting

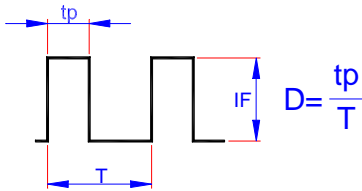


Module No. AOL-MLx-A11000C-061x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100µs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

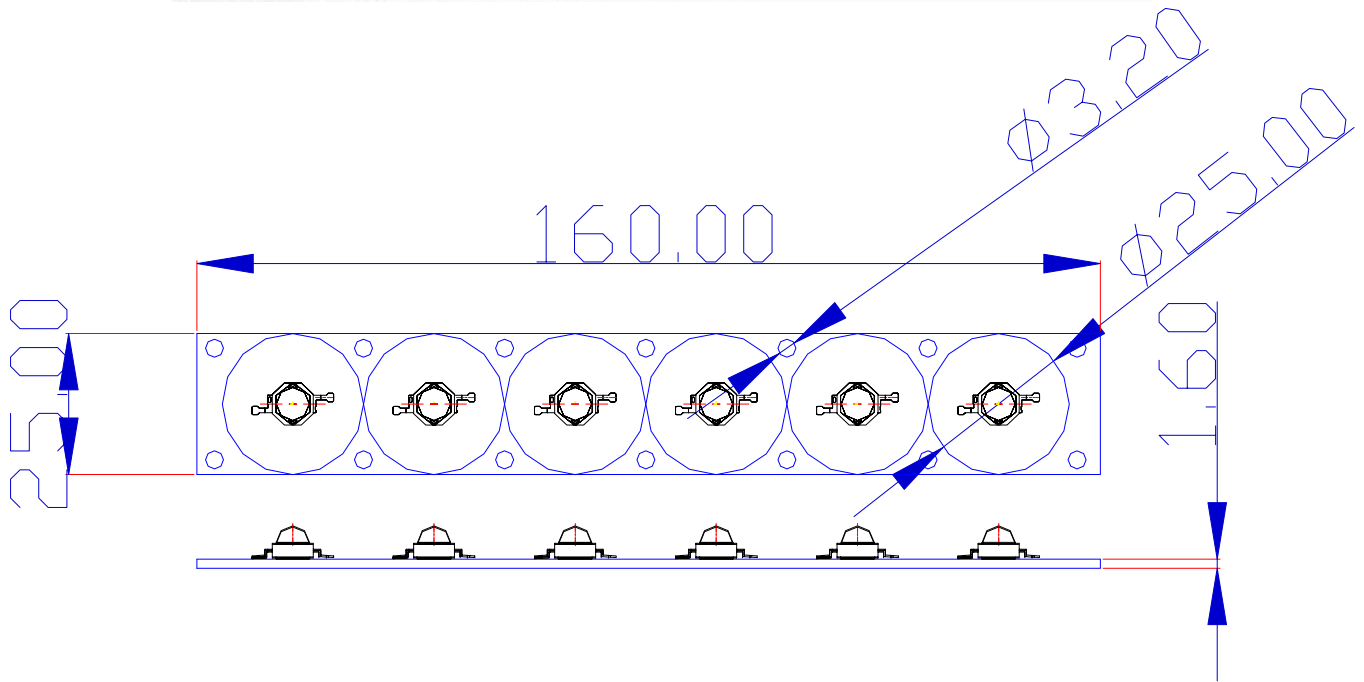
Duty cycle(per Emitter):



Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ.	Max.	
White	16.8	--	24.0	180
Warm White	16.8	--	24.0	132
Red	12.0	--	16.5	156
Red Orange	12.0	--	16.5	180
Amber	12.0	--	16.5	180
True Green	16.8	--	24.0	180
Blue	16.8	--	24.0	54

AOL-MLx-A11000C-061x



Drill Φ 3.2
Unit : mm

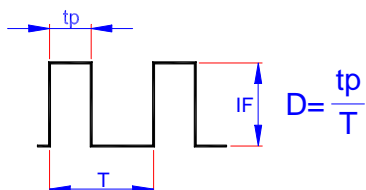


Module No. AOL-MLx-A12000C-121x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	700	mA
Peak pulse current;(tp ≤ 100μs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

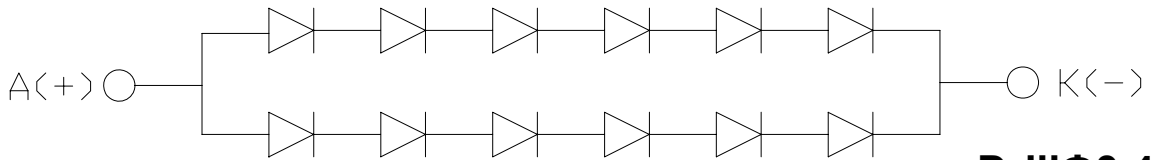
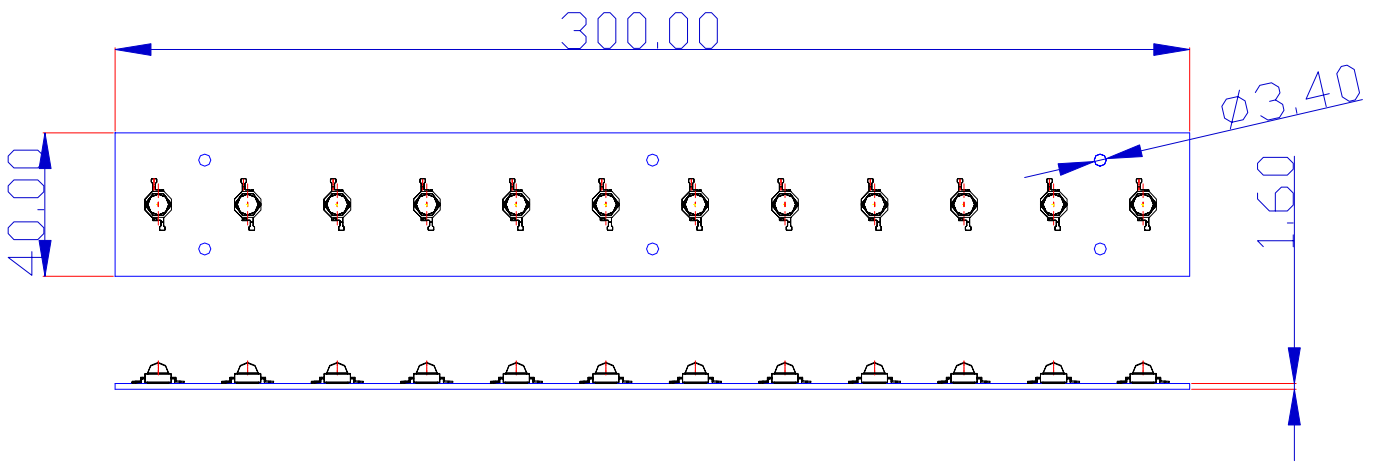
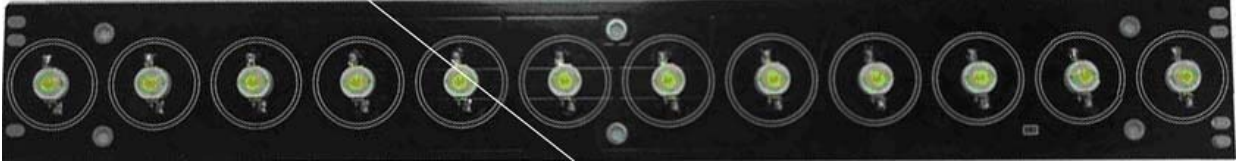
Duty cycle(per Emitter):



Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ.	Max.	
White	16.8	--	24.0	360
Warm White	16.8	--	24.0	264
Red	12.0	--	16.5	312
Red Orange	12.0	--	16.5	360
Amber	12.0	--	16.5	360
True Green	16.8	--	24.0	360
Blue	16.8	--	24.0	108

AOL-MLx-A12000C-121x



DrillΦ3.4
Unit : mm

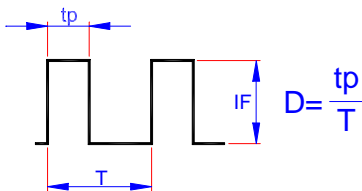


Module No AOL-MPx-A5000C-041x
AOL-MLx-A6000C-041x
AOL-MCx-A13000C-041x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100µs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

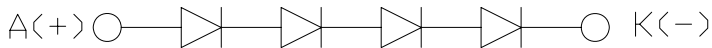
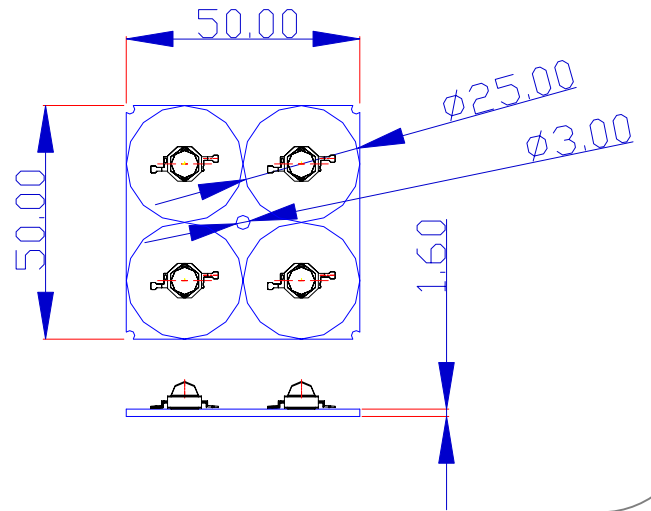
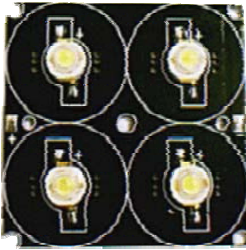
Duty cycle(per Emitter):



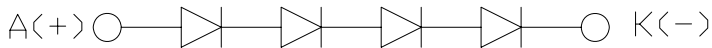
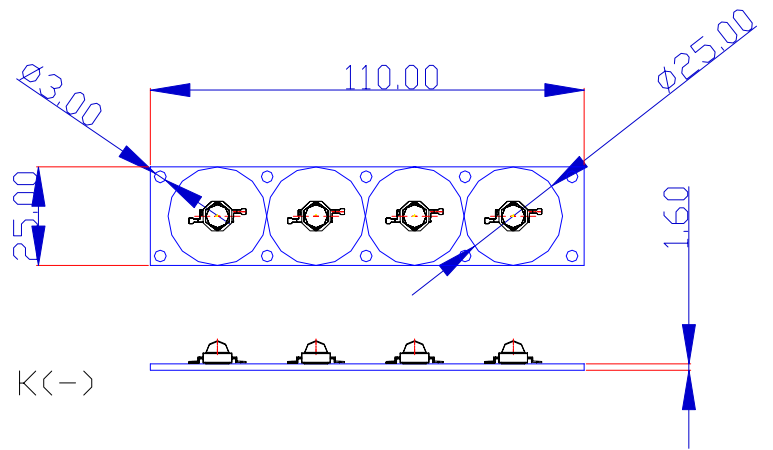
Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ.	Max.	
White	11.2	--	16.0	120
Warm White	11.2	--	16.0	88
Red	8.0	--	11.0	104
Red Orange	8.0	--	11.0	120
Amber	8.0	--	11.0	120
True Green	11.2	--	16.0	120
Blue	11.2	--	16.0	36

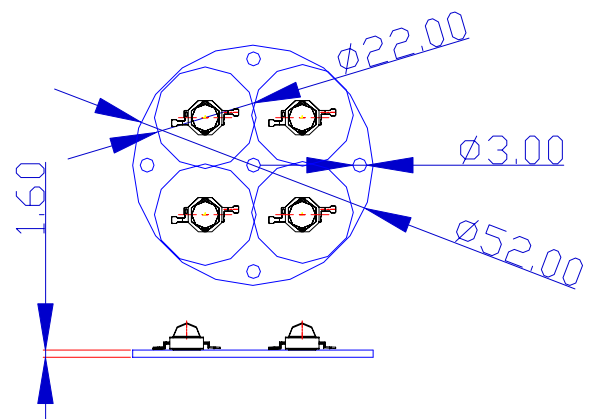
AOL-MPx-A5000C-041x



AOL-MLx-A6000C-041x



AOL-MCx-A13000C-041x



Drill Φ 3.00
Unit : mm

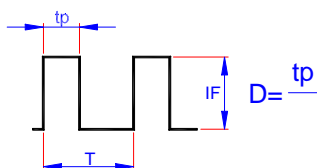


Module No. AOL-MCx-A7000C-061x
AOL-MRx-A7000C-061x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100μs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

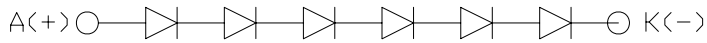
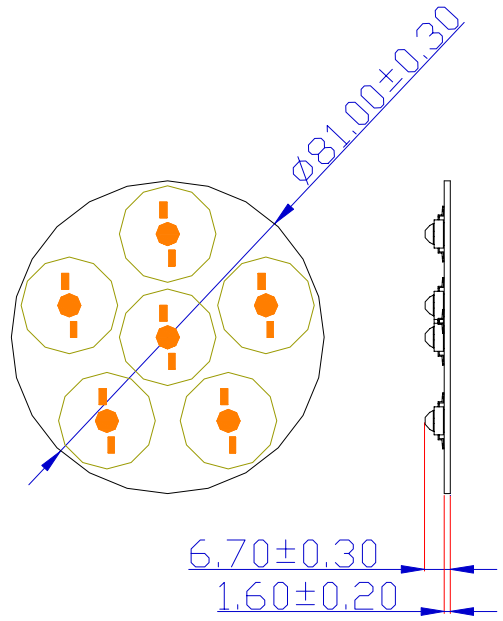
Duty cycle(per Emitter):



Forward Voltage @350mA

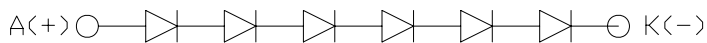
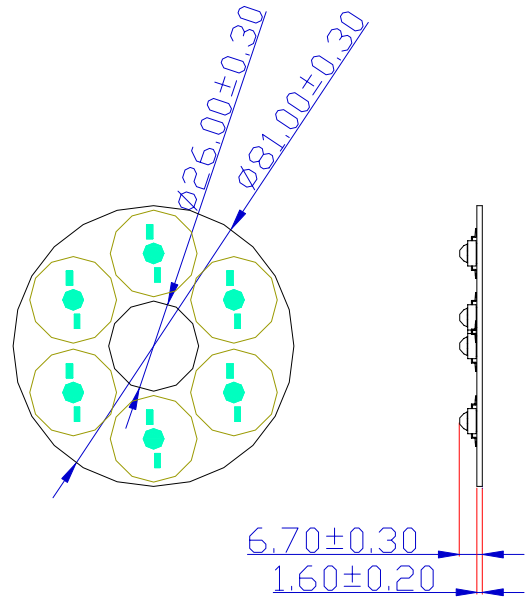
Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ	Max.	
White	16.8	--	24.0	180
Warm White	16.8	--	24.0	132
Red	12.0	--	16.5	156
Red Orange	12.0	--	16.5	180
Amber	12.0	--	16.5	180
True Green	16.8	--	24.0	180
Blue	16.8	--	24.0	54

AOL-MCx-A7000C-061x



Unit : mm

AOL-MRx-A7000C-061x



Unit : mm

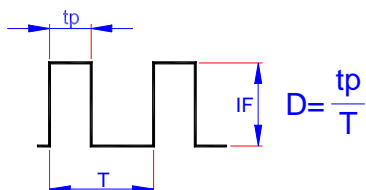


Module No. AOL-MCx-A8000C-031x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100μs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

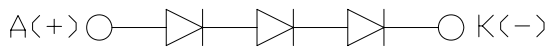
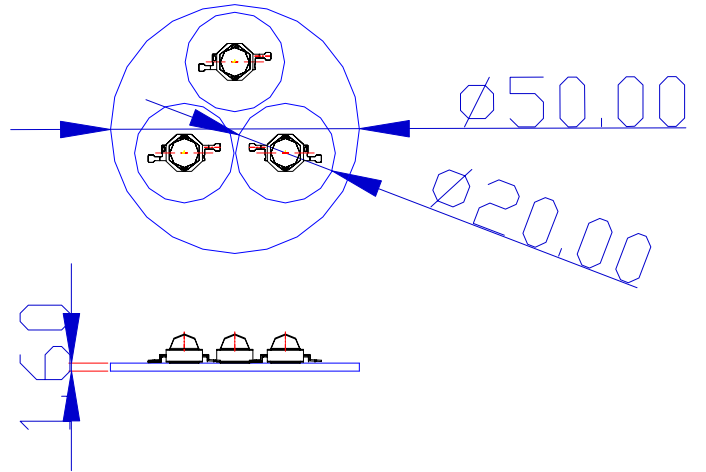
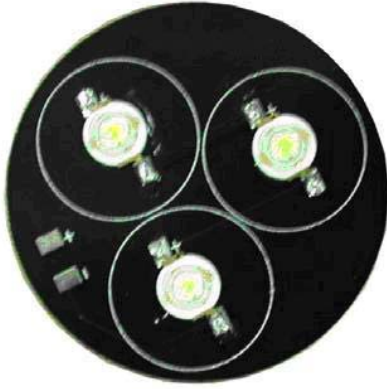
Duty cycle(per Emitter):



Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ	Max.	
White	8.4	--	12.0	90
Warm White	8.4	--	12.0	66
Red	6.0	--	8.25	78
Red Orange	6.0	--	8.25	90
Amber	6.0	--	8.25	90
True Green	8.4	--	12.0	90
Blue	8.4	--	12.0	27

AOL-MCx-A8000C-031x



Unit : mm

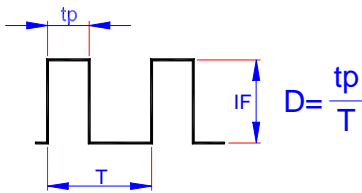


Module No. AOL-MCRGB-A8000F-031x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100µs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

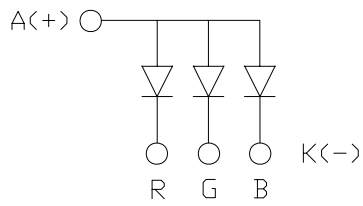
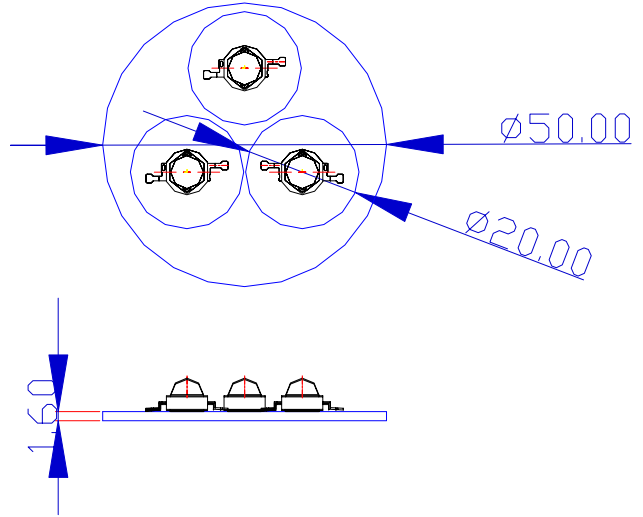
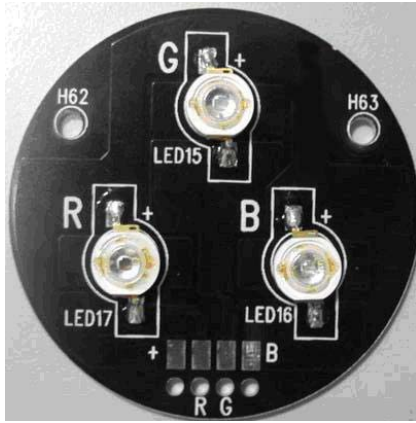
Duty cycle(per Emitter):



Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ	Max.	
Red	2.0	--	2.75	26
True Green	2.8	--	4.0	30
Blue	2.8	--	4.0	9

AOL-MCRGB-A8000F-031x



Unit : mm

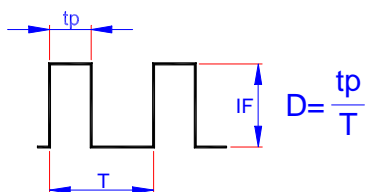


Module No. AOL-MRRGB-A7000F-061x

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
DC Forward Current	I_F	350	mA
Peak pulse current;(tp ≤ 100μs, Duty cycle=0.005) ^{*1}	I_{pulse}	1000	mA
LED junction Temperature (at 350 mA)	T_j	125	°C
Operating Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Manual Soldering Time at 260°C (Max.)	T_{sol}	5	seconds

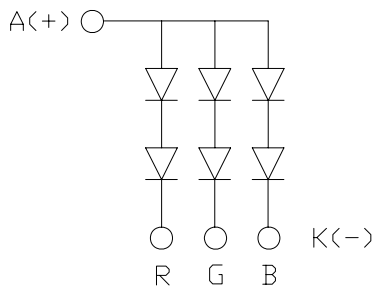
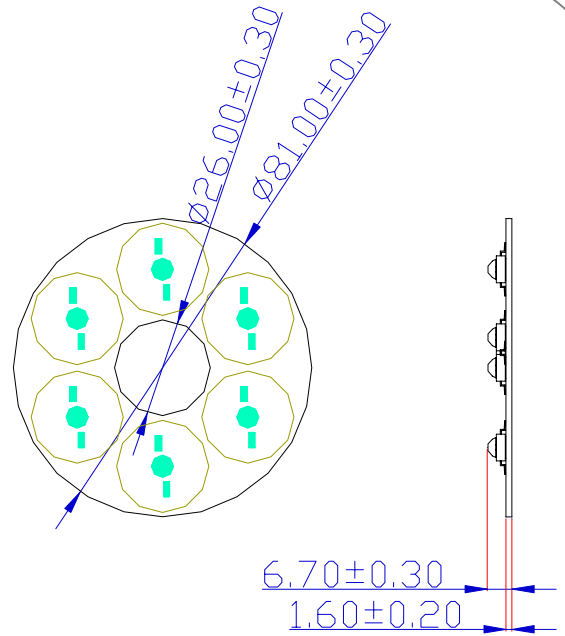
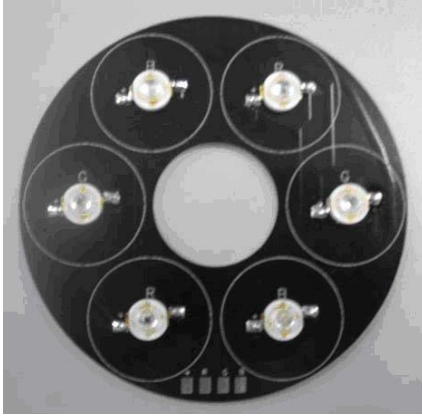
Duty cycle(per Emitter):



Forward Voltage @350mA

Color	$V_F(V)$			Flux(lm) Typical
	Min.	Typ	Max.	
Red	4.0	--	5.5	52
True Green	5.6	--	8.0	60
Blue	5.6	--	8.0	18









AOL-MRRGB-A7000F-061x



Unit : mm



Module Operating Temperature @ Ta = 25°C

Module Part No.	Dimension(mm)	Emitter (EDEW-1LA1) Reference V _F (V)	ALPCB Temp.(°C)	Picture
AOL-MLx-A11000C-061x	160*25*1.6	3.7	75	
AOL-MLx-A12000C-121x	300*40*1.6	3.7	60	
AOL-MPx-A5000C-041x	50*50*1.6	3.7	80	
AOL-MLx-A6000C-041x	110*25*1.6	3.7	75	
AOL-MCx-A13000C-041x	52*1.6	3.7	85	
AOL-MCx-A7000C-061x	81*1.6	3.7	65	
AOL-MRx-A7000C-061x	81*25*1.6	3.7	70	
AOL-MCx-A8000C-031x	50*1.6	3.7	77	

Suggestions:

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