

4th generation

LED

with the advanced and patented

M-COB technology

The most advanced
LED technology in
lighting systems



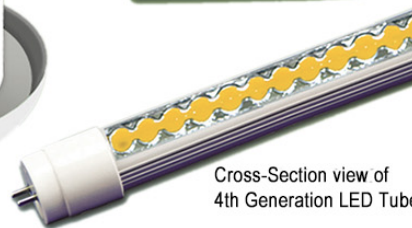
No large
heat sink
needed.

Silicone Chips on Aluminum Plate



Silicone Chip

Silicone Chips on Aluminum Plate



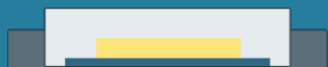
Cross-Section view of
4th Generation LED Tube



ECO-LED Bulb



MCOB



Single-layer Aluminum Plate

3-5 YEARS 

WARRANTY



110/220V



10-60W



90-100LM/W

LED LIGHTING

Advanced and patented 4th generation

M-COB package

Innovations of the 4th generation ECO led technology result in durable energy-efficient, economical lighting products for long use by household and industrial consumers. This latest advanced technology surpasses all previous generations of led lighting in terms of light quantity, energy savings, heat dispersion and overall efficiency.

Bright ,clear light at less wattage

At 100 to 140 luminous per watt, the eco 4th generation led lamp gives the right brightness at less wattage. The 4th generation 9 watt led lamp gives as much, or even better, brightness than a 32 watt CFL or a 100 watt incandescent bulb.

Longer lamp life

The eco 4th generation led lamp works for over 40.000 hours. Used for 10 hours a day, the eco led lamp will last more than 11 years.

Cooler operation temperature

The application of silicone chips directly onto the aluminium plate results in heat dispersion up to 97%, allowing the lamp to operate in a cooler environment saving more energy.

Better power efficiency

The eco 4th generation led lamps uses the ic-type power supply that operates at more than 90% power efficiency.

Bigger savings

With all the features of the eco 4th generation led products, consumers save more money on lighting cost and equipment replacement.

5-year warranty period

The manufacturers of the eco 4th generation led lamps assure consumers of product quality with a guarantee of 5 years.

4° generation LED



Single -layer aluminum plate

110 to 140 lumens /watt
40000 to 60000 hours
Lamp life

5-year warranty

Silicone chip are applied
directly on the aluminum plate
Allowing for up to 97% heat
dispersion

With ic -type power supply

3° generation LED



Big led chip on 3-layer plate

70 to 90 luminous/watt
15000 to 20000 hours lamp
life

2year warranty

Larger silicone chips are
welded the same way as on
the 2nd generation sur-
face-mounted
Device ,with only 50% heat
dispersion

2° generation LED



Small led chip on 3-layer plate

70 to 90 lumens /watt
15000 to 20000 hours lamp
life

2-year warranty

Silicone chip are welded on to
a 3-layer aluminum plate
resulting in higher cost
With only 50% heat dispersion

1° generation LED

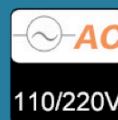
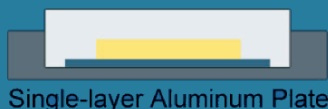


Led pin on pc board

60 to 70 lumens/watt
6000 to 10000 hours lamp life

1-year warranty

Lighting structure is made up
of many pins on a pc board
But with poor heat dispersion
from multiple pins



4W



MA-B-4W

5.5W



MA-B-5.5W

7W



MA-B-7W

9W



MA-B-9W

4W



MA-ME14-4W

4W



MA-ME27-4W



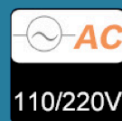
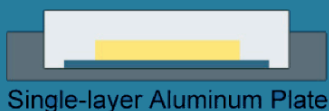
TECHNICAL SPECIFICATION

Item	Size (mm)	LED type	Material	Power	IP	Weight	Packing
MA-B-4W	55*55*100	MCOB	Airlines-cast Aluminum + PC	Internal	IP53	66g/92g	1 pc/inner box 100 pcs/ctn
MA-B-5.5W	55*55*100					66g/92g	
MA-B-7W	55*55*100					66g/92g	
MA-B-9W	55*55*100					66g/92g	
MA-ME14-4W	58*58*115					68g/94g	
MA-ME27-4W	58*58*115					68g/94g	

Item	Power	Input Voltage	Cool white Lamp effect	Warm white Lamp effect	Power Factor	Power Efficiency	Frenquency(HZ)
MA-B-4W	4W	85-135V 0 185-265V AC	90-100 lumen/watt	80-90 lumen/watt	>0.85	>90%	50/60HZ
MA-B-5.5W	5.5W						
MA-B-7W	7W						
MA-B-9W	9W						
MA-ME14-4W	4W						
MA-ME27-4W	4W						

Item	Color Temp.(K)	CRI	Luminous Flux	Beam Angle	Illumination Lux		
					1m	2m	3m
MA-B-4W	Warm White 200-3000k	>70	320-380lm	110-120°	71.00	17.75	7.89
			360-400lm		67.00	16.75	7.40
MA-B-5.5W			440-500lm		106.00	26.50	11.80
			500-550lm		95.00	23.75	10.56
MA-B-7W	Neutral White 4000-4500k		560-630lm		148.00	40.16	16.88
			630-700lm		136.00	38.90	18.70
MA-B-9W	Cool White 5800-6500k		720-810lm		212.00	53.00	23.00
			810-900lm		190.00	47.50	21.00
MA-ME14-4W			320-380lm		71.00	17.75	7.89
			360-400lm		67.00	16.75	7.40
MA-ME27-4W			320-380lm		71.00	17.75	7.89
			360-400lm		67.00	16.75	7.40

Item	Working Humidity	Equal to light	Working Temperature	Storage temperature	Working Life
MA-B-4W	10%-90%	12W	-20~50°C	-30~60°C	> 40000 ore
MA-B-5.5W		18W			
MA-B-7W		22W			
MA-B-9W		28W			
MA-ME14-4W		12W			
MA-ME27-4W		18W			



3W

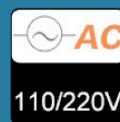
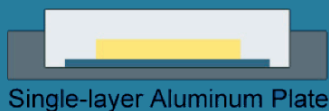


MA-CL-3W

3W



MA-C-3W



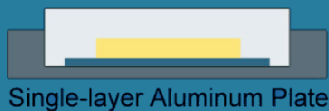
TECHNICAL SPECIFICATION

Item	Size (mm)	LED type	Material	Power	IP	Product Weight	Packing way
MA-CL-3W	35*35*125	MCOB	Airlines-cast	Internal	IP53	42.6g/56.8g	1pc/inner box.
MA-C-3W	35*35*125		Aluminum+ PC			42.6g/56.8g	100pcs/ctn

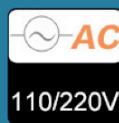
Item	Power	Input Voltage	Cool white Lamp effect	Warm white Lamp effect	Power Factor	Power Efficiency	Frenquency(HZ)
MA-CL-3W	3W	85-135V or 185-265VAC	90-100 lumen/watt	80-90 lumen/watt	>0.85	>90%	50/60HZ
MA-C-3W	3W						

Item	Color Temp.(K)	CRI	Luminous Flux	Beam Angle	Illumination Lux		
					1.2m	1.8m	3m
MA-C-3W	Warm White 200-3000k	>70	240-270lm	110-120°	67.34	28.26	9.55
	Neutral White 4000-4500k		270-300lm		70.34	31.26	11.25
MA-CL-3W	Cool White 5800-6500k		240-270lm		72.00	35.50	11.80
			270-300lm		85.37	40.00	13.56

Item	Working Humidity	Equal to halogen light	Working Temperature	Storage temperature	Working Life
MA-C-3W	10%-90%	25W	-20~50°C	-30~60°C	> 40000 hrs
MA-CL-3W		25W			



3-5 YEARS
WARRANTY



3 inch 4 watt

4 inch 5.5 watt

6 inch 9 watt

8 inch 12 watt



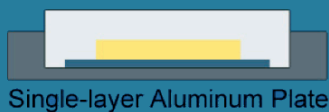
TECHNICAL SPECIFICATION

Item	Cut out (mm)	Size (mm)	Hight (mm)	Material	Power	IP	Weight	Packing
MA-D-4W	80	105	46	ABS +Glass	External	IP53	108.5	60pcs/ctn
MA-D-5.5W	110	145	46				192.0	48pcs/ctn
MA-D-9W	160	195	46				325.0	48pcs/ctn
MA-D-12W	200	232	54				530.0	24pcs/ctn

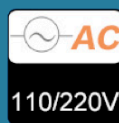
Item	Power	Input Voltage	Output Voltage	Output Current	Power Factor	Power Efficiency	Frenquency(HZ)
MA-D-4W	4W	85-265V AC	47.7-48.1V	69.1-71.3mA	>0.82	>88%	50/60HZ
MA-D-5.5W	5.5W		86.4-88.4V	56.6-58.4mA			
MA-D-9W	9W		97.7-100.9V	67.2-81.2mA			
MA-D-12W	12W		48.3-48.2V	205-215mA			

Item	CCT	CRI	Luminous Flux	Beam Angle	Illumination Lux		
					1m	2m	3m
MA-D-4W	Cool White 6000-6500K	>70	210-240lm	110-120°	71.00	17.75	7.89
			200-230lm		67.00	16.75	7.40
MA-D-5.5W	Neutral White 4000-4500K		320-360lm		106.00	26.50	11.80
			280-320lm		95.00	23.75	10.56
MA-D-9W	— — Warm white		650-700lm		212.00	53.00	23.00
			560-600lm		190.00	47.50	21.00
MA-D-12W	2700-3000k		780-820lm		252.00	63.00	28.00
			740-780lm		238.00	60.00	26.50

Item	Working Humidity	Equal to halogen light	Working Temperature	Storage temperature	Working Life
MA-D-4W	10%-90%	10-15W	-20~45°C	-30~60°C	> 40000 ore
MA-D-5.5W		15-25W			
MA-D-9W		25-40W			
MA-D-12W		40-60W			



3-5 YEARS
WARRANTY



3W



MA-HC-3W

5W



MA-HC-5W

8W



MA-HC-8W

3W



MA-HE-3W

5W

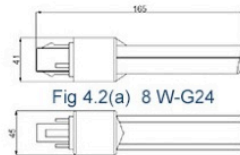
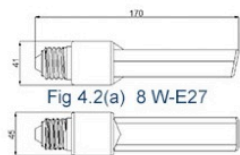
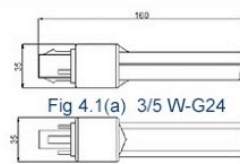
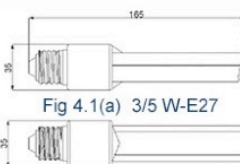


MA-HE-5W

8W



MA-HE-8W



TECHNICAL SPECIFICATION

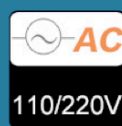
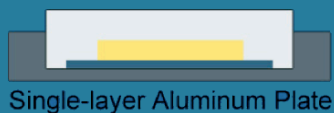
Item	Size (mm)	LED type	Material	Power	IP	Product Weight	Packing way
MA-HC-3W	35*35*160/165	MCOB	Aluminum Alloy	External	IP53	120g/125g	1pc/inner box, 100pcs/ctn
MA-HC-5W	35*35*160/165					120g/125g	
MA-HC-8W	45*41*165/170					165g/178g	

* Size and weight based on G24/E27

Item	Power	Input Voltage	Output Voltage	Output Current	Power Factor	Power Efficiency	Frenquency(HZ)
MA-HC-3W	3W	85-265V AC	44.8-51.2V	58-62mA	>0.82	>90%	50/60HZ
MA-HC-5W	5W		67.2-76.8V	58-62mA			
MA-HC-8W	8W		66.0-64.0V	118-124mA			

Item	Color Temp.(K)	CRI	Luminous Flux	Beam Angle	Illumination Lux		
					1m	2m	3m
MA-HC-3W	Warm white 2700-3000k	>70	270-300lm	110-120°	50	15	8
			240-280lm		50	15	8
MA-HC-5W	Neutral White 4000-4500K		450-480lm		93	30	16
			430-470lm		83	24	13
MA-HC-8W	Cool White 6000-6500K		760-790lm		150	40	20
			700-730lm		118	40	19

Item	Working Humidity	Equal to halogen light	Working Temperature	Storage temperature	Working Life
MA-HC-3W	10%-90%	10W	-20~45°C	-30~60°C	> 40000 ore
MA-HC-5W		13W			
MA-HC-8W		20W			



8W



MA-T-8W

12W



MA-T-12W

16W



MA-T-16W

18W



MA-T-18W

23W



MA-T-23W



TECHNICAL SPECIFICATION

Item	Size (mm)	LED type	Material	Power	IP	Weight	Packing way
MA-T-8W	600MM	MCOB	Airlines-cast Aluminum + PC	Internal	IP53	230g	1pc/inner box, 40pcs/ctn
MA-T-12W	1200MM					380g	
MA-T-16W	1200MM					380g	
MA-T-18W	1200MM					380g	
MA-T-23W	1500MM					480g	

Item	Power	Input Voltage	Cool white Lamp effect	Warm white Lamp effect	Power Factor	Power Efficiency	Frenquency(HZ)
MA-T-8W	8W	85-135V or 185-265V AC	130-145 luminos/watt	120-135 luminous/watt	>0.85	>90%	50/60HZ
MA-T-12W	12W						
MA-T-16W	16W						
MA-T-18W	18W						
MA-T-23W	23W						

Item	CCT	CRI	Luminous Flux	Beam Angle	Illumination Lux		
					1.2m	1.8m	3m
MA-T-8W	Warm white 2700-3000k Neutral White 4000-4500K Cool White 5800-6500K	>70	960-1080lm	110-120°	140.90	60.75	20.40
			1040-1160lm		156.98	69.77	25.12
MA-T-12W			1440-1620lm		210.65	89.35	28.70
			1560-1740lm		299.8	133.2	47.98
MA-T-16W			1920-2160lm		227.50	101.5	36.55
			2080-2320lm		279.00	113.9	37.90
MA-T-18W			2160-2430lm		440.50	189.7	65.30
			2340-2610lm		456.36	202.8	73.02
MA-T-23W			2760-3100lm		667.90	320.8	125.7
			2990-3330lm		688.90	347.8	135.8

Item	Working Humidity	Equal to light	Working Temperature	Storage temperature	Working Life
MA-T-8W	10%-90%	28W	-20~50°C	-30~60°C	> 40000 ore
MA-T-12W		36W			
MA-T-16W		44W			
MA-T-18W		50W			
MA-T-23W		80W			

