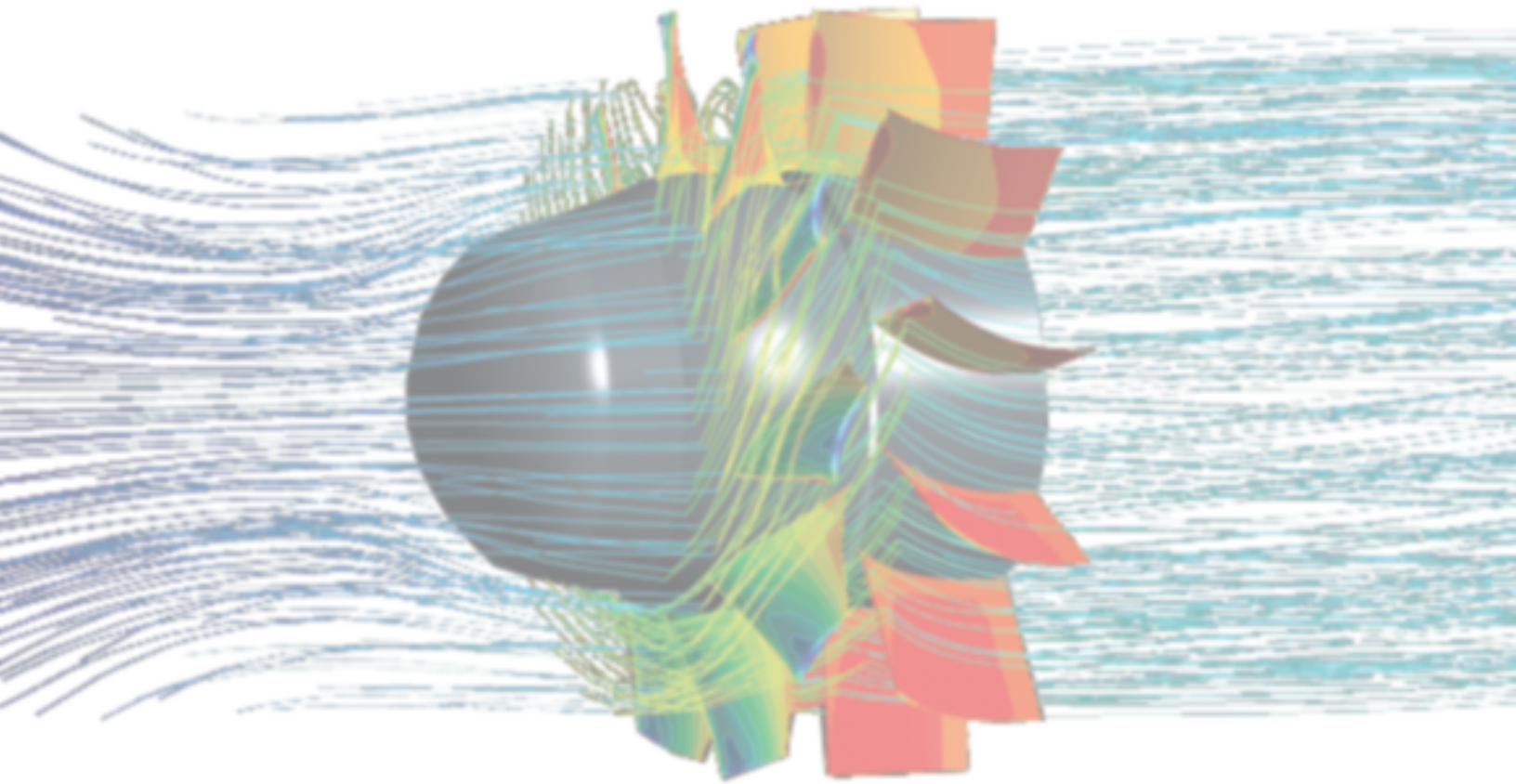




PWM Blowers



 **STAY COOL**

800.580.6688
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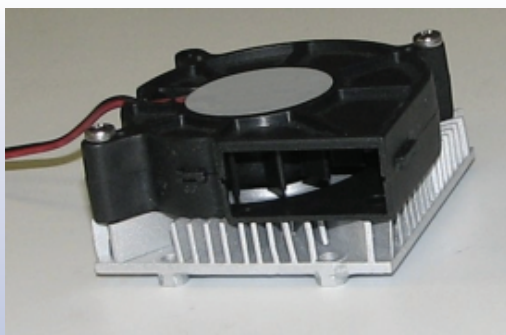
40x20, 50x15, 57x28, 60x15 PWM Blowers **exceptional cooling for low profile electronic enclosures**

JMC presents low form factor blowers designed to provide superior cooling in low profile high density electronic enclosures. These blowers will fit into enclosures ranging from 17mm to 30mm in height. In addition to their small size all of these blowers are offered with 4 wire high frequency switching PWM control. This feature insures optimal thermal performance at the lowest possible acoustical signature.

Another application for these blowers is in combination with heat sinks. When using blowers in this way you create a low profile active thermal cooler that also provides system level cooling for the entire enclosure. The blower draws cool air from the outside of the enclosure through strategically located vents. The cool outside air is directed through the chassis, past the fins of the heat sink, and into the blower. The blower then passes the collected hot air to outside of the chassis either directly or through a duct system.

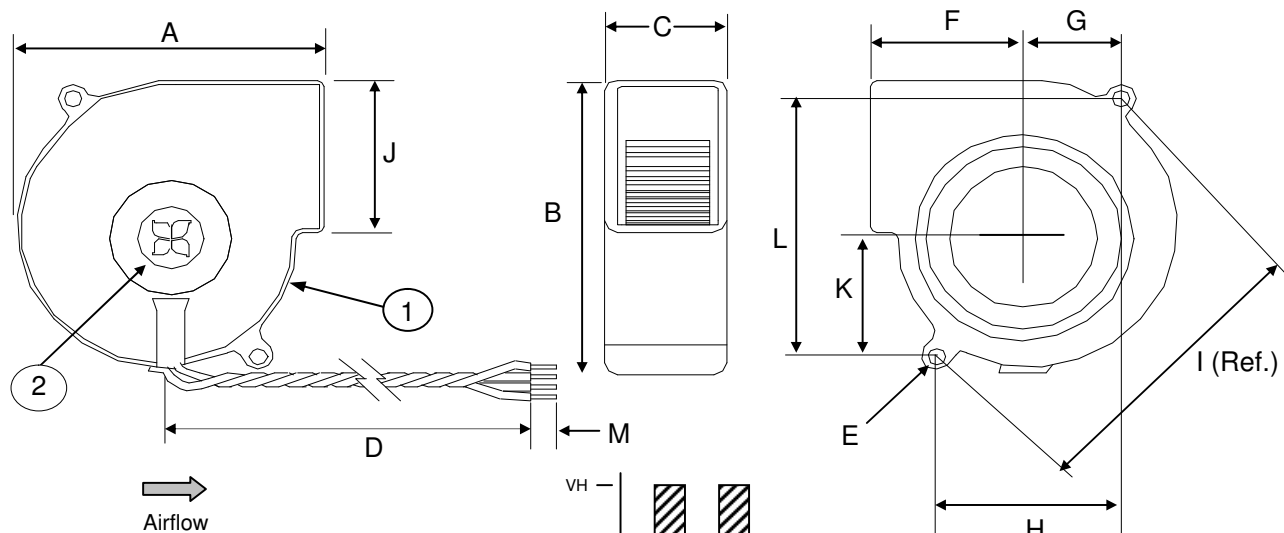
Features:

- Pulse Width Modulation
- Compact Design
- Ball Bearing
- UL & TUV Certified
- 100% RoHS compliant
- Heat sink combos available (pictured below)

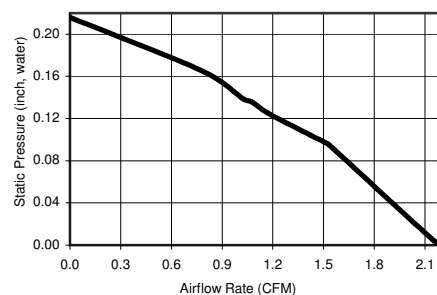
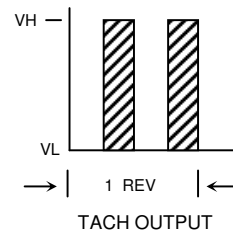


Item Numbers:

- 40x20mm:
04008B0026M
- 50x15mm:
05004B0028M
- 57x28mm:
05700B0026M
- 60x15mm:
06005B0028M



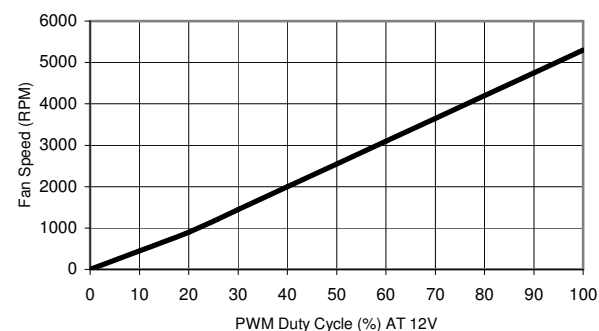
WIRE DESIGNATION	
FUNCTION	WIRE COLOR
GND (-)	Black
PWR (+)	Yellow
Signal (Tach)	Green
PWM	Blue



Revision History				
EC No	REV	Date	Description	Approvals
NA	M	7/10/13	Created Dwg.	JE

NOTES

1. THIS BLOWER AND ALL OF ITS COMPONENTS COMPLY WITH THE REQUIREMENTS OF RoHS DIRECTIVE 2011/65/EU
2. RPM TOLERANCE IS +/-30% AT DUTY CYCLES BELOW 30% AT DUTY CYCLES BETWEEN 30% AND 100%, RPM TOLERANCE CONVERGES LINEARLY TO 10%.
3. TWIST WIRES 1 TURN MIN PER 10 MM



MECHANICAL

PHYSICAL

ELECTRICAL

ITEM	SPECIFICATION	UNITS / NOTES
Speed	5300 +/- 10%	RPM at 12 Vdc
Airflow	2.20	CFM in Free Air
Static Pressure	0.22	Inch, H ₂ O
Bearing Type	Dual Ball	N/A
Operating Temp	(-)10 to 70	Deg C
Storage Temp	(-)40 to 70	Deg C
Noise Level	29.5	dBA Max at 1M
Blade Material	UL 94V-0	N/A
Frame Material	UL 94V-0	N/A
Wire Size	26	AWG
Wire Type	UL 1061	N/A
Wire Assembly	First Slot Only	N/A
Regulatory Approvals	UL CUL TUV	N/A
Net Weight	TBD	Grams
Operating Voltage	10.8 to 13.2	Vdc
Start up Duty Cycle	30	%
Rated Current	0.08 (0.09 Max)	Amp
Input Power	0.96 (1.08 Max)	Watts
Tach Output	2	Pulses/Rev
Polarity Protection	Yes	N/A
Motor Protection	Yes	Type 2

All Dimensions in mm

A	40.0 +/- 0.5
B	40.0 +/-0.5
C	20.0 +/-0.5
D	300 +/- 30
E	2 x 3.5. Dia +/-0.5
F	20.2 +/-0.5
G	17.05 +/-0.3
H	34.5 +/-0.3
I	49.3 +/- 0.5 Ref
J	30.0 +/-0.3
K	16.4 +/-0.3
L	34.5 +/- 0.3
M	6.4 +/- 1.0

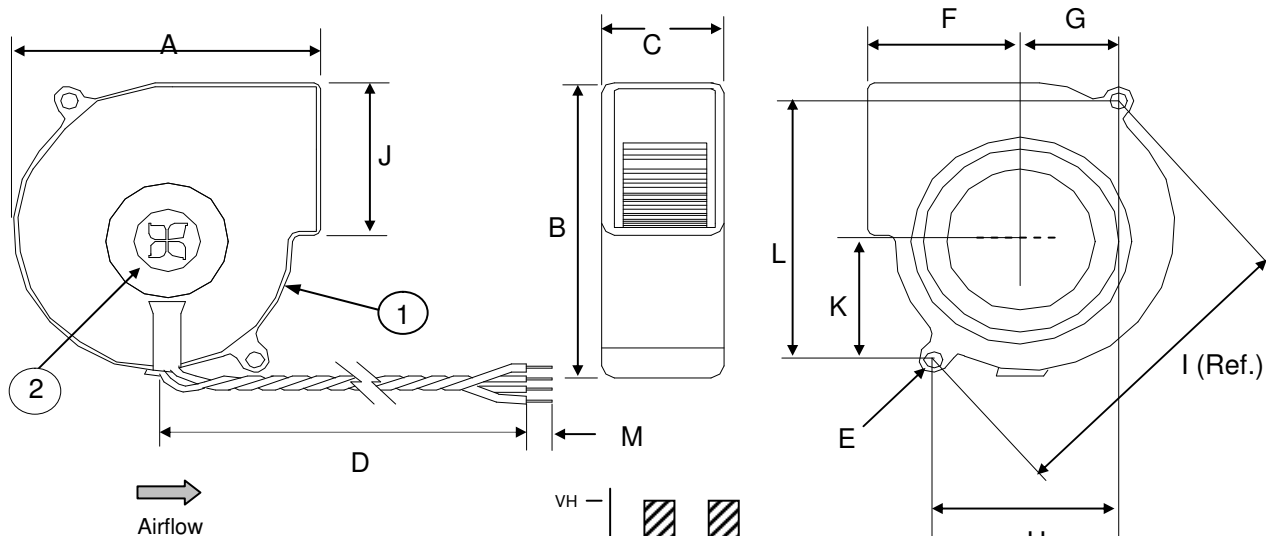
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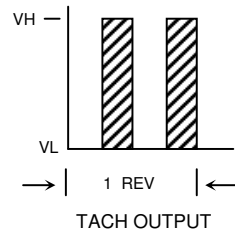
2	1	Logo Label	L04008B0026	JMC
1	1	Fan Model	B4020-12 402Y	JMC
Item	Qty	Description	Part Number	MFG
Austin Texas, USA Dong Guan, PRC				
Drawn By A. Aguirre		Blower, 40x40x20 mm , 12 Vdc Dual Ball, MRKT		
Engineer J. Elmo		Size A1	Drawing Number 04008B0026	Rev M
Scale: None			Sheet 1 of 1	

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WIRE DESIGNATION	
FUNCTION	WIRE COLOR
GND (-)	Black
PWR (+)	Yellow
SIGNAL (Tach)	Green
PWM	Blue



MECHANICAL

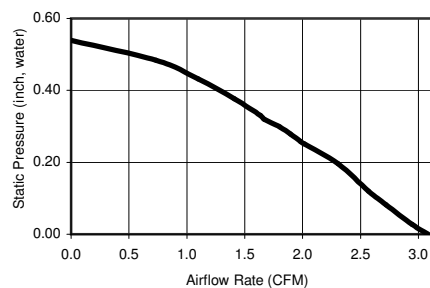
ITEM	SPECIFICATION	UNITS / NOTES
Speed	5000 +/- 10%	RPM at 12 Vdc
Airflow	3.1	CFM in Free Air
Static Pressure	0.54	Inch, H ₂ O
Bearing Type	Dual Ball	N/A
Operating Temp	(-)10 to 70	Deg C
Storage Temp	(-)40 to 70	Deg C
Noise Level	38	dBA Max at 1M

PHYSICAL

Blade Material	UL 94V-0	N/A
Frame Material	UL 94V-0	N/A
Wire Size	26	AWG
Wire Type	UL 1061	N/A
Wire Assembly	First Slot Only	N/A
Regulatory Approvals	UL CUL TUV	N/A
Net Weight	TBD	Grams

ELECTRICAL

Operating Voltage	10.8 to 13.2	Vdc
Start up Duty Cycle	30	%
Rated Current	0.15 (0.17 Max)	Amp
Input Power	1.8 (2.04 Max)	Watts
Tach Output	2	Pulses/Rev
Polarity Protection	Yes	N/A
Motor Protection	Yes	Type 2



All Dimensions in mm	
A	51.5 +/- 0.5
B	51.5 +/-0.5
C	15.2 +/-0.5
D	300 +/- 30
E	2 x 4.4 Dia +/-0.3
F	25.3 +/-0.3
G	20.2 +/-0.3
H	38.1 +/-0.5
I	57.4 +/- 0.5 Ref
J	19.8 +/-0.3
K	20.2 +/-0.3
L	43.0 +/- 0.5
M	6.4 +/- 1.0

Revision History				
EC No	REV	Date	Description	Approvals
NA	M	7/10/13	Created Dwg.	JE

NOTES

- THIS BLOWER AND ALL OF ITS COMPONENTS COMPLY WITH THE REQUIREMENTS OF RoHS DIRECTIVE 2011/65/EU
- RPM TOLERANCE IS +/-30% AT DUTY CYCLES BELOW 30%. AT DUTY CYCLES BETWEEN 30% AND 100%, RPM TOLERANCE CONVERGES LINEARLY TO 10%.
- TWIST WIRES 1 TURN MIN PER 10 MM



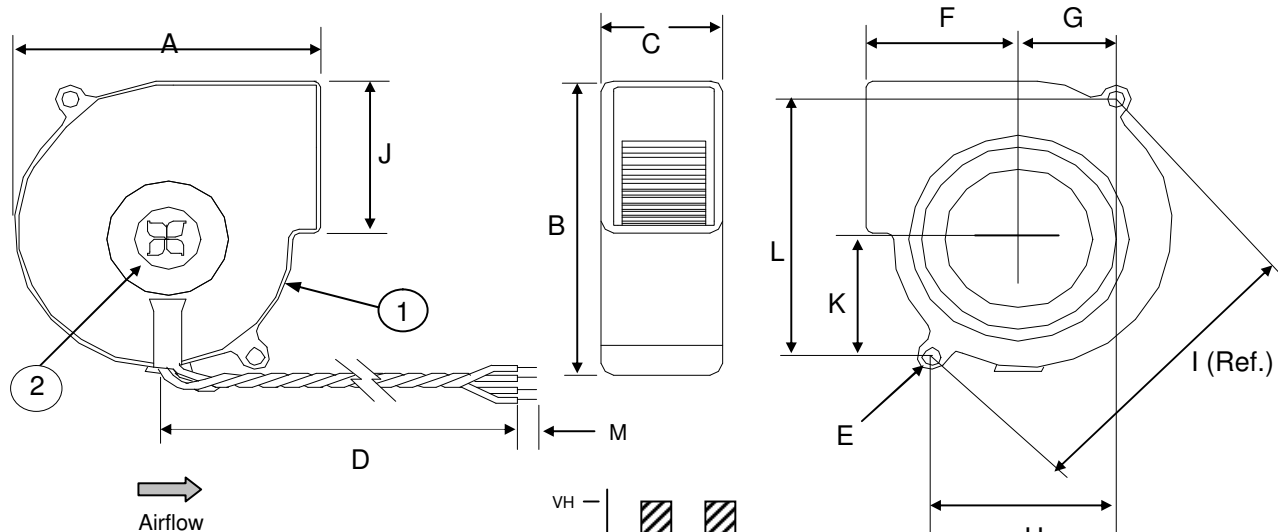
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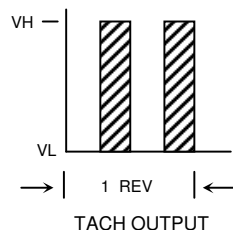
2	1	Logo Label	L05004B0028	JMC
1	1	Fan Model	B5015-12 387Y	JMC
Item	Qty	Description	Part Number	MFG
Austin Texas, USA Dong Guan, PRC		<div><div>JMC</div><div>The Fan Company</div><div>Blower,50x50x15 mm , 12 Vdc Dual Ball, MRKT</div></div>		
Drawn By A. Aguirre				
Engineer J. Elmo		Size A1	Drawing Number 05004B0028	Rev M
Scale: None			Sheet 1 of 1	

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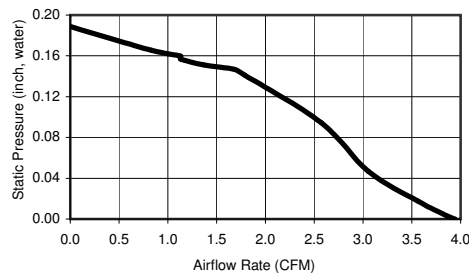
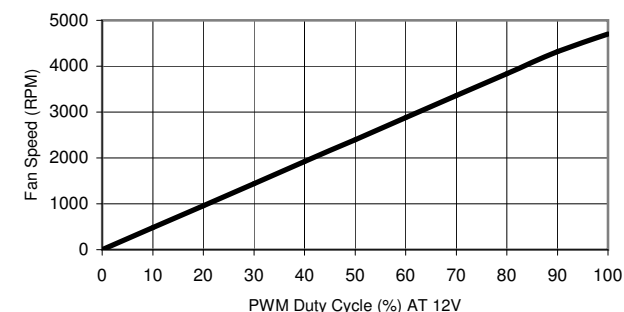
WIRE DESIGNATION	
FUNCTION	WIRE COLOR
GND (-)	Black
PWR (+)	Yellow
SIGNAL (Tach)	Green
PWM	Blue



Revision History				
EC No	REV	Date	Description	Approvals
NA	M	7/10/13	Created Dwg.	JE

NOTES

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- TWIST WIRES 1 TURN MIN PER 10 MM

**PQ CURVE****All Dimensions in mm**

A	57.0 +/- 0.5
B	57.0 +/-0.5
C	28.0 +/-0.5
D	300 +/- 30
E	2 x 4.4 Dia +/-0.5
F	28.2 +/-0.5
G	23.2 +/-0.3
H	44.7 +/-0.3
I	60.8 +/- 0.5 Ref
J	29.1 +/-0.3
K	21.3 +/-0.3
L	43.6+/- 0.3
M	6.4 +/- 1.0

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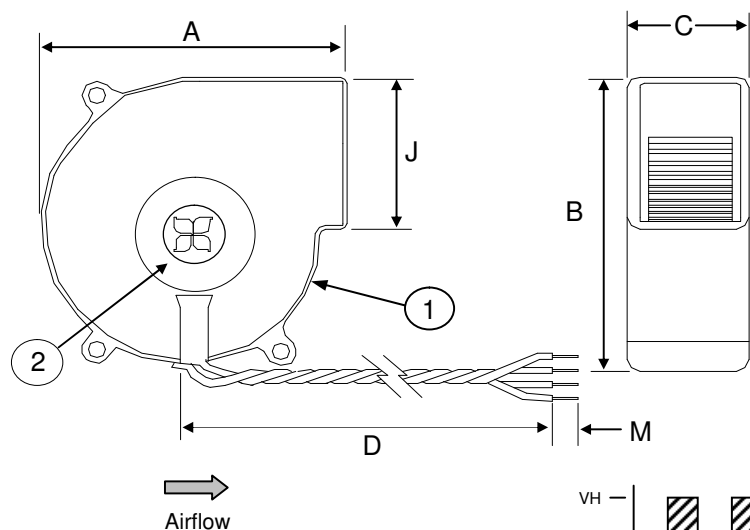
MECHANICAL**PHYSICAL****ELECTRICAL**

ITEM	SPECIFICATION	UNITS / NOTES
Speed	4700 +/- 10%	RPM at 12 Vdc
Airflow	3.9	CFM in Free Air
Static Pressure	0.19	Inch, H ₂ O
Bearing Type	Dual Ball	N/A
Operating Temp	(-)10 to 70	Deg C
Storage Temp	(-)40 to 70	Deg C
Noise Level	30.9	dBA Max at 1M
Blade Material	UL 94V-0	N/A
Frame Material	UL 94V-0	N/A
Wire Size	26	AWG
Wire Type	UL 1061	N/A
Wire Assembly	First Slot Only	N/A
Regulatory Approvals	UL CUL TUV	N/A
Net Weight	TBD	Grams
Operating Voltage	10.8 to 13.2	Vdc
Startup Voltage	10.8	Vdc
Rated Current	0.12 (0.14 Max)	Amp
Input Power	1.44 (1.68 Max)	Watts
Tach Output	2	Pulses/Rev
Polarity Protection	Yes	N/A
Motor Protection	Yes	Type 2

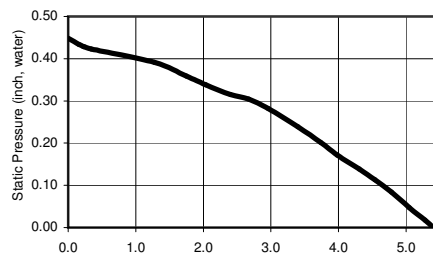
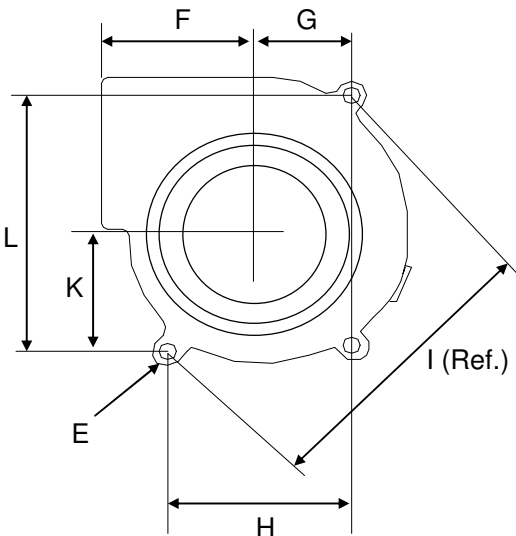
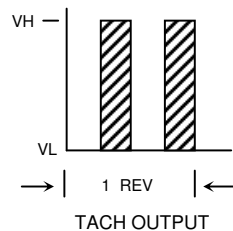
2	1	Logo Label	L05700B0026	JMC
1	1	Fan Model	B5728-12 371Y	JMC
Item	Qty	Description	Part Number	MFG
Austin Texas, USA Dong Guan, PRC		<div><div>JMC</div><div>The Fan Company</div></div> <div>Blower,57x57x28 mm , 12 Vdc, Dual Ball, MRKT</div>		
Drawn By A. Aguirre				
Engineer J. Elmo		Size A1	Drawing Number 05700B0026	Rev M
Scale: None			Sheet 1 of 1	

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WIRE DESIGNATION	
FUNCTION	WIRE COLOR
GND (-)	Black
PWR (+)	Yellow
SIGNAL (Tach)	Green
PWM	Blue



PQ CURVE

All Dimensions in mm

A	60.0 +/- 0.5
B	60.0 +/-0.5
C	15.0 +/-0.5
D	300 +/- 30
E	3 x 4.5 Dia +/-0.5
F	29.0 +/-0.5
G	31.0 +/-0.3
H	50.0 +/-0.3
I	70.7 +/- 0.5 Ref
J	32.0 +/-0.3
K	22.8 +/- 0.3
L	50.0 +/- 0.3
M	6.4 +/- 1.0

Revision History				
EC No	REV	Date	Description	Approvals
NA	M	7/10/13	Created Dwg.	JE

NOTES

1. THIS BLOWER AND ALL OF ITS COMPONENTS COMPLY WITH THE REQUIREMENTS OF RoHS DIRECTIVE 2011/65/EU
3. RPM TOLERANCE IS +/-30% AT DUTY CYCLES BELOW 30%. AT DUTY CYCLES BETWEEN 30% AND 100%, RPM TOLERANCE CONVERGES LINEARLY TO 10%.
4. TWIST WIRES 1 TURN MIN PER 10 MM



	ITEM	SPECIFICATION	UNITS / NOTES
MECHANICAL	Speed	5100 +/- 10%	RPM at 12 Vdc
	Airflow	5.4	CFM in Free Air
	Static Pressure	0.45	Inch, H ₂ O
	Bearing Type	Dual Ball	N/A
	Operating Temp	(-)10 to 70	Deg C
	Storage Temp	(-)40 to 70	Deg C
	Noise Level	42.0	dBA Max at 1M
PHYSICAL	Blade Material	UL 94V-0	N/A
	Frame Material	UL 94V-0	N/A
	Wire Size	26	AWG
	Wire Type	UL 1061	N/A
	Wire Assembly	First Slot Only	N/A
	Regulatory Approvals	UL, CUL, TUV	N/A
	Net Weight	TBD	Grams
ELECTRICAL	Operating Voltage	10.8 to 13.2	Vdc
	Startup Voltage	10.8	Vdc
	Rated Current	0.12 (0.14 Max)	Amp
	Input Power	1.44 (1.68 Max)	Watts
	Tach Output	2	Pulses/Rev
	Polarity Protection	Yes	N/A
	Motor Protection	Yes	Type 2

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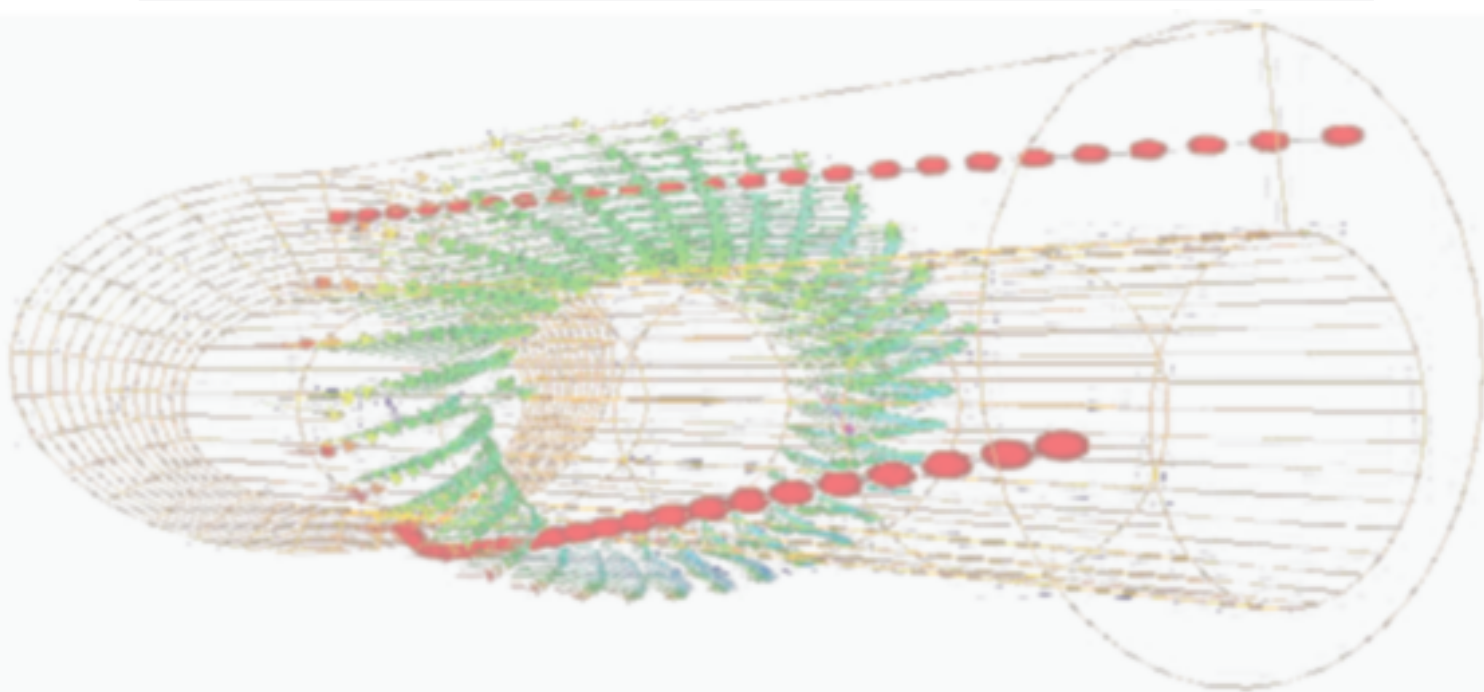
2	1	Logo Label	L06005B0028	JMC
1	1	Fan Model	B6015-12 392Y	JMC
Item	Qty	Description	Part Number	MFG
Austin Texas, USA Dong Guan, PRC		<div>JMC</div> <div>The Fan Company</div>	Blower,60x60x15 mm , 12 Vdc, Dual Ball, MRKT	
Drawn By A. Aguirre				
Engineer J. Elmo			Size A1	Drawing Number 06005B0028
Scale: None			Sheet 1 of 1	

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are available right now!
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About JMC Products

JMC is a thermal solutions provider with headquarters located in the beautiful city of Austin, Texas. Application development and customer support reside in the Austin headquarters, while manufacturing occurs at JMC's Dong Guan, China 60,000 square ft. facility. In addition, JMC has application centers in Europe and Taiwan. JMC sells its products to major Original Equipment Manufacturers (OEM) in Europe, Asia and the Americas. JMC focuses on developing and innovating high performance, reliable air-moving devices that are utilized in consumer electronics, personal computers, networking, storage and server applications. Our exceptional products and customer support insure our customers always STAY COOL.



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