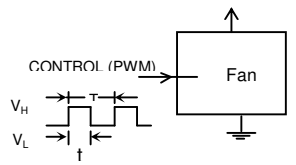
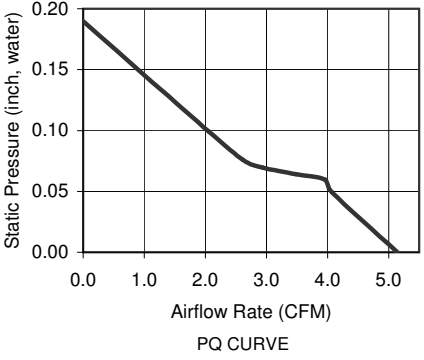


Frame Type (Closed Barrell)



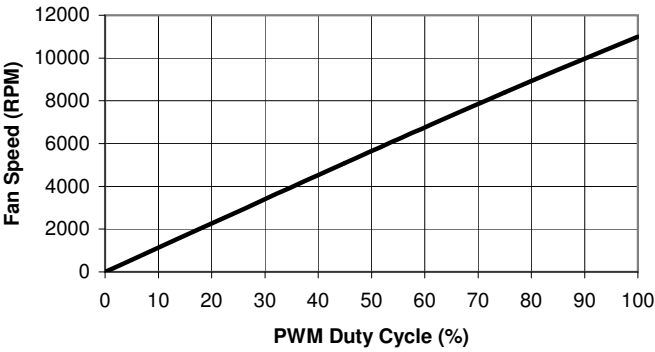
DUTY CYCLE = $t/T \times 100\%$
 PWM Fcy: 25KHz +/- 5KHz
 PWM_High V_H : 2.8V - 5.5V
 PWM_Low V_L : 0V - 0.8V
 PWM Pin Oben: Full Speed
 FRONT END PWM CIRCUIT



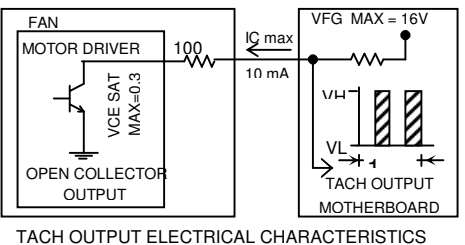
Revision History				
EC No	REV	Date	Description	Approvals
NA	X00	9/17/13	Created Dwg.	JE

NOT RELEASED FOR PRODUCTION

- NOTES**
- THIS FAN AND ALL OF ITS COMPONENTS COMPLY WITH THE REQUIREMENTS OF RoHS DIRECTIVE 2011/65/EU
 - BASE MODEL FAN - ANY CHANGES TO SPECIFICATION REQUIRES NEW PART NUMBER.
 - RPM TOLERANCE IS +/-30% AT DUTY CYCLES BELOW 30%. AT DUTY CYCLES BETWEEN 30% AND 100%, RPM TOLERANCE CONVERGES LINEARLY TO 10%.



PWM DUTY CYCLE vs. FAN SPEED AT 12V



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

All Dimensions in mm	
A	30 +/-0.5
B	24 +/- 0.3
C	10.2 +/- 0.5
D	3 X 3.2 +/- 0.3
E	300 +/- 30
F	6.4 +/- 1.0

	ITEM	SPECIFICATION	UNITS / NOTES
MECHANICAL	Speed	11000 +/- 15%	RPM at 12 Vdc
	Airflow	5.14	CFM in Free Air
	Static Pressure	0.19	Inch, H ₂ O
	Bearing Type	Ball, Dual	N/A
	Operating Temp	(-)10 to 70	Deg C
	Storage Temp	(-) 40 to 70	Deg C
PHYSICAL	Noise Level	30.7	dBA Max at 1M
	Blade Material	UL 94V-0	N/A
	Frame Material	UL 94V-0	N/A
	Wire Size	28	AWG
	Wire Type	UL1061	N/A
	Wire Assembly	Thru. Fan Depth	N/A
ELECTRICAL	Regulatory Approvals	UL CUL TUV	N/A
	Net Weight	TBD	Grams
	Operating Voltage	10.8 - 13.2	Vdc
	Start up Voltage	NA	Vdc
	Start up PWM duty cycle	30	%
	Rated Current	0.10 (0.11 Max)	Amp
	Input Power	1.20 (1.32 Max)	Watts
	Tach Output	NA	Pulses/Rev
	Polarity Protection	Yes	N/A
	Motor Protection	Yes	Type 2

2	1	Logo Label	L03000B0004	JMC
1	1	Fan Model	3010-12	JMC
Item	Qty	Description	Part Number	MFG
Austin Texas, USA		JMC		Fan, 30x10 mm, 12Vdc, Tach, PWM, DBB, Base Model
Dong Guan, PRC		The Fan Company		
Drawn By		Size	Drawing Number	Rev
A. Aguirre		A1	03000B0004	X00
Engineer		Scale: None		Sheet 1 of 1
J. Elmo				

PROPRIETARY NOTE