

Standards and Specifications of Model: FD4028B12W11-3R

A. General Specification

Item	Specification / Standard / Condition	
Outline Dimension	40 mm x 40 mm x 28 mm	
Bearing	Dual Ball Bearing	
Rated Voltage	DC 12 V	Tolerance: ± 10%
Starting Voltage	DC 6 V	
Rated Current	0.26 A	1. Rated Voltage 2. 25°C, 65% RH
Power Consumption	3.12 W	
Speed	11,500 R.P.M.	1. Free Air 2. Rated Voltage 3. 25°C, 65% RH 4. Tolerance: ± 10%
Maximum Airflow	14.7 CFM	1. Rated Voltage 2. AMCA Standard 3. Rated Current
Maximum Static Pressure	18.0 mm-H ₂ O	
Noise Level	44.0 dB (A)	1. Rated Voltage 2. Measured in a Non-Echo Chamber 3. CNS 8753 Standard 4. ISO 3744 Test Condition
Life	75,000 hrs 40°C	MTTF (Mean Time to Failure Conf. Level 90%)
Number of Blade	5 Blades	
Number of Pole	4 Poles	
Rotating Direction	Counter-Clockwise	
Plastic Material: Blade, Housing, Bobbin	1. UL 94V-0 2. P.B.T. + 30% GF Black	
Lead Wire	UL1007, 26 AWG	Red: (+) Black: (-) Yellow: Tachometer
Connector		

B. Electrical Specification

Item	Specification / Condition
Locked Rotor Protection	a. Auto power off after locked at rated voltage for 1 sec. b. After auto power off, circuit attempt to restart in 2-6 sec.
Polarity Protection	Circuit is protected when V _{CC} & GND are exchanged.
Insulation Resistance	10 m.Ohm / between unshielded wire and frame at 500 VDC/min.
Dielectric Strength	5 mA Maximum. / Measured between lead wire + and frame at 500 VAC/min.

C. Environmental Specification

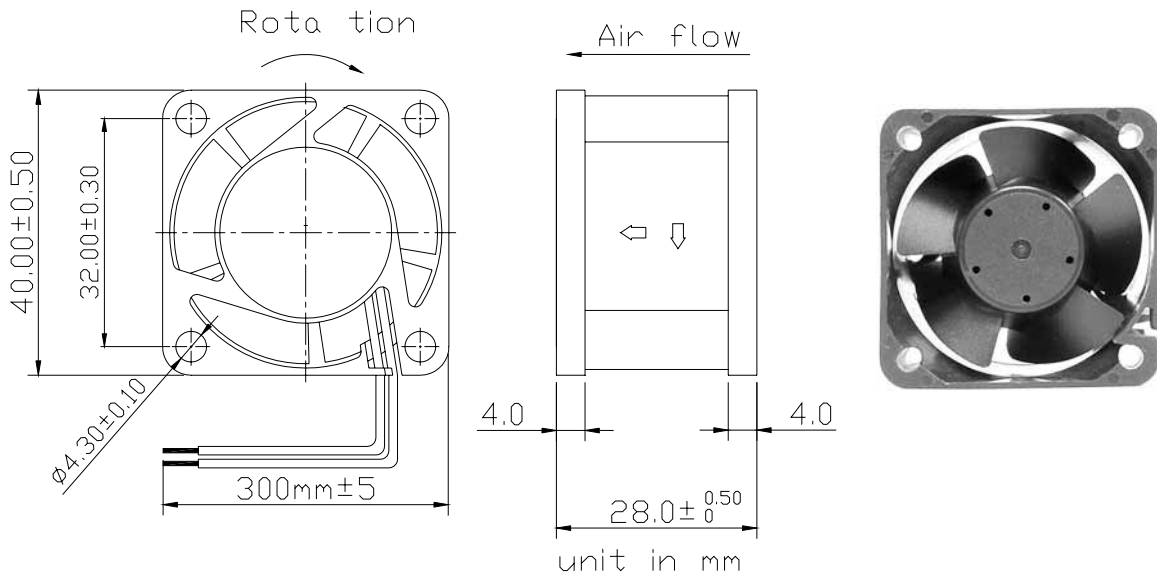
Item	Specification / Condition
Operating Condition	Temperature: -10°C ~ +70°C Humidity: 35% ~ 85% RH
Storage Temperature	Temperature: -10°C ~ +70°C Humidity: 35% ~ 85% RH
Humidity	Per MIL-STD-202F Method 103B Life: 96 hours Humidity: 95% Temperature: +40 ± 2°C
Thermal Shock	Per MIL-STD-202F Method 107D, Condition D
Packing Vibration Test	Packing condition: X, Y, Z 3 directions, 1.1G load vibration test for 30 min.
Packing Shock Proof Test	1 corner, 3 edges, 6 faces natural drop from 60cm high, packed



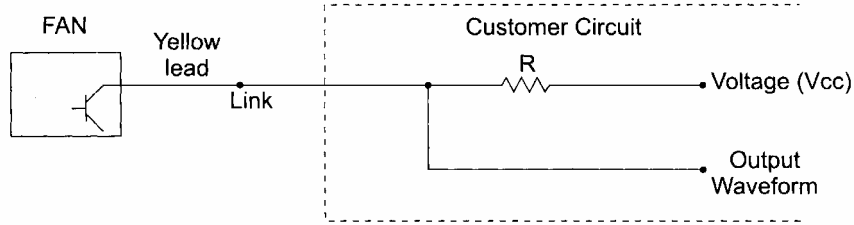
D. Safety Approvals

Safety Approval	File No.
UL	E194726
CUL	E194726
TUV	R2054644

E. Model Drawing

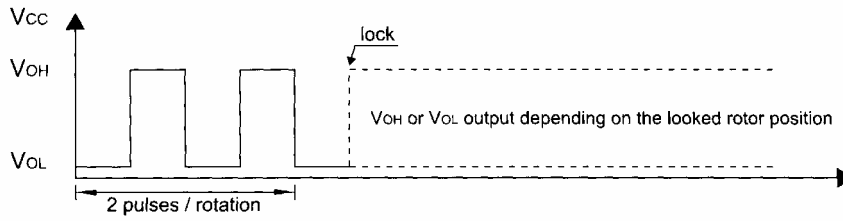


F. Tachometer (Speed Sensor)

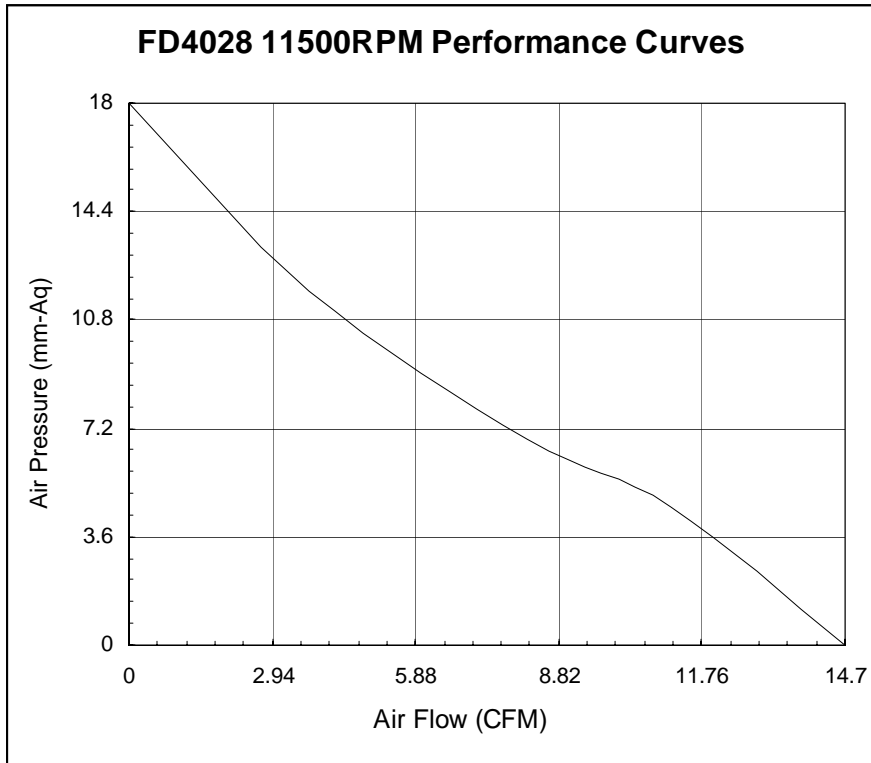


** Please select "R" to make "Link" less than 10mA ** * Vcc: 30V MAX , Link: 10mA MAX

Output Waveform



G. Air Flow Performance Curve



H. MTTF Curve

