

# Atomic Brushless Cooler / Motor

Technology Transfer Service



**FEATURES**

- Stable vibration and low EMI
- Low power and low wear
- Brushless commutation and extra long service life (10 times longer than the brush-type counterpart in the On-Off life test)

**APPLICATIONS**

Mobile phone, vibratory cooling module, vibrating capsuloscissors, hand-held massagers, massage goggles, bluetooth telephone, smart watch, alert function for portable electronics and hand tool, and touch panel vibratory feedback system.

**SPECIFICATIONS**

Parameter	Value
Product Name	Vibration Motor
Rated Voltage (VDC)	3.0
Operating Voltage (VDC)	2.0-3.3
Rotation Speed (RPM)	7,000-4,000
Current (mA)	48
Vibration Intensity (ms <sup>2</sup> )	5.0-11.8 MAX
High Test Voltage (VDC)	500
Insulation Resistance (MΩ)	100000 VDC
Weight (g)	1.5
Weight of Loading Mass (g)	20-100

**VIBRATION PERFORMANCE CURVE**

10 Vibration Motor

10 Vibration Motor V-I-A Curve



**FEATURES**

- Extra mini and slim. Suitable for portable electronics cooling
- High efficiency and low power
- High airflow and low noise
- Self-cleaning bearing seat for a long service life

**APPLICATIONS**

Projector - HUD - IMRC - SmartBook - CCTV - PortableGPS  
Micro Fuel Cell - Portable Gas/Puffable Detector - Portable Plasma Generator - Mass/Goggle/Helmet/Ventilation and Defogging

**SPECIFICATIONS**

Parameter	Value
Product Name	Atomic Blower
Rated Voltage (VDC)	Anyly powered Bearing
Operating Voltage (VDC)	2.0-3.6
Rated Current (mA) @ 10%	50
Rated Current (mA) @ 20%	7,000
Air Flow (CFM)	0.14
Static Pressure (inH2O)	2.44
Noise (dB)	25
Life Expectancy (Hours)	>100,000
Weight (g)	1.1

**PERFORMANCE CURVE**

RFB1804 P-Q Curve

**Brushless Micro Cooler**  
**RFA1504**

**Brushless Micro Motor**  
**RVN1004**

**Brushless Blower**  
**RFB1804**

## AWARDS:

2011 Exhibition of Invention of Geneva, Switzerland, Gold Medal

2011 Warsaw Invention show of Iwis, Gold Medal

2011 Moscow Salon Inventions and Innovations Technologies of Archimedes, Gold Medal

2011 Inventeco Invention Show, Gold Medal

2013 Invention Fair of Kuwait, Gold Medal

## TECHNOLOGY SUMMARY:

DC Brushless Atomic Cooler series --RFA1804 & 1504, with modularized stator of the international patent, is an axial air gap without iron core architecture, and it turns a plurality of hollow coil, originally requiring manual or fully automated assembly, into SMD components, which can be mass production by modularization, and processed with high reliability. The features including ultra-thin, small size, low carbon emission, low start-up voltage, low noise and longer life. It helps provide effective heat dissipation, improving the overall reliability of the application device and saving the power life to mobile devices such as pico projector, HUD, mini-tablet and other handheld

*We provide technology transfer service.  
If you are interested in it, please contact us at:*

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