

EF50101B2-C04C-S99 SUNON 12VDC 50x50x10mm 4-Wire Axial Fan Datasheet



Brand: SUNON

SKU: [1008350934883](#)

Category: Axial & Centrifugal Fans

Price: **\$19.99**

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Product Page:

<https://www.equipspares.com/product/ef50101b2-c04c-s99-sunon-12vdc-50x50x10mm-4-wire-axial-fan>

Product Description

The SUNON EF50101B2-C04C-S99 is a high-efficiency DC axial fan engineered for precision thermal management in compact electronic assemblies. Utilizing SUNON's proprietary Magnetic Levitation (MagLev) motor technology, this unit eliminates physical contact between the shaft and bearing, significantly reducing friction, noise, and vibration while extending operational lifespan. The fan operates at a rated voltage of 12VDC with a power consumption of 1.44W, delivering a robust airflow-to-size ratio essential for high-density computing environments. Its 4-wire interface supports Pulse Width Modulation (PWM) signal input, allowing for dynamic speed regulation and optimized thermal impedance based on real-time system load. The structural rigidity of the thermoplastic frame ensures stability under continuous operation.

Model Number: EF50101B2-C04C-S99

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Product Type: DC Axial Fan

Motor Technology: Brushless DC (MagLev)

Rated Voltage: 12 VDC

Voltage Range: 10.2 - 13.8 VDC

Power Consumption: 1.44 W

Rated Current: 0.12 A

Rated Speed: 5800 RPM ($\pm 15\%$)

Max. Air Flow: 13.0 CFM (22.1 m³/h)

Max. Static Pressure: 0.14 inH₂O (35 Pa)

Noise Level: 28.0 dB(A)

Bearing Type: MagLev (Vapo Bearing System)

Dimensions: 50 x 50 x 10 mm

Weight: 20 g

Termination: 4-Wire (PWM/Tachometer)

Wire Configuration: Red (+), Black (-), Yellow (Tach), Blue (PWM)

Housing Material: Thermoplastic PBT (UL94V-0)

Blade Material: Thermoplastic PBT (UL94V-0)

Operating Temperature: -10°C to +70°C

Storage Temperature: -40°C to +70°C

Life Expectancy: 60,000 Hours at 40°C

Ingress Protection: IP5X (Dust Protected)

Safety Certifications: UL, CUR, TUV, CE

The EF50101B2-C04C-S99 is specifically designed for integration into portable computing devices and space-constrained hardware. It is widely utilized as a primary cooling solution for laptops, notebooks, and All-in-One (AIO) desktop computers where internal clearance is limited to 10mm. Additionally, the EF50101B2-C04C-S99 serves effectively in small form-factor servers, network switches, and medical instrumentation, ensuring critical processors and chipsets remain within safe thermal envelopes to prevent throttling and hardware failure.

Supplemental Images

