

EF50101B2-C02U-S99 SUNON 12VDC 50x50x10mm PWM Axial Fan Datasheet



Brand: SUNON

SKU: [657727286465](#)

Category: Axial & Centrifugal Fans

Price: **\$25.99**

E-mail: sales@equipspares.com

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Product Page:

<https://www.equipspares.com/product/ef50101b2-c02u-s99-sunon-12vdc-50x50x10mm-pwm-axial-fan>

Product Description

SUNON EF50101B2-C02U-S99 is a 12VDC 50x50x10mm Axial Fan optimized for ultra-thin laptop thermal management and compact electronic enclosures. This unit utilizes a brushless DC motor integrated with a precision 2-ball bearing architecture to ensure long-term structural rigidity and reduced thermal impedance. The aerodynamic design is specifically engineered for low-profile applications where space is at a premium. Operating at 0.90W with a rated current of 0.075A, it provides efficient heat dissipation. The 4-wire configuration supports PWM speed control and tachometer feedback, allowing for precise cooling adjustments based on real-time system temperatures and load requirements.

Model Number: EF50101B2-C02U-S99

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Product Type: DC Axial Fan

Rated Voltage: 12VDC

Voltage Range: 6.0 - 13.8 VDC

Rated Current: 0.075A

Power: 0.90W

Rated Speed: 4500 RPM

Bearing Type: 2-Ball Bearing

Max. Air Flow: 11.0 CFM (18.7 m³/h / 0.31 m³/min)

Max. Static Pressure: 2.8 mmH₂O (27.4 Pa / 0.11 inH₂O)

Dimensions: 50 x 50 x 10 mm

Weight: 20g

Life Expectancy: 70,000 Hours at 40°C

Speed Control: PWM (Pulse Width Modulation)

Signal Output: Tachometer / F-Signal

Termination: 4-Wire Lead Wires

Housing Material: Thermoplastic PBT (UL94V-0)

Blade Material: Thermoplastic PBT (UL94V-0)

Insulation Class: Class A

Operating Temperature: -10°C to +70°C

Storage Temperature: -40°C to +70°C

Protection Features: Auto Restart, Polarity Protection

EF50101B2-C02U-S99 Applications

1. Ultra-thin Laptop Cooling: The 10mm low-profile frame and PWM control allow for precise thermal regulation in constrained chassis environments, serving as a high-reliability replacement fan for mobile workstations.
2. Compact Network Switches: High static pressure relative to size overcomes internal impedance in 1U or sub-1U networking hardware where airflow paths are restricted.

Supplemental Images

