

U40G12MS1A5-53J652 Nidec 12VDC 40mm 3-Wire Axial Fan Datasheet



Brand: Nidec

SKU: [899114967963](#)

Category: Axial & Centrifugal Fans

Price: **\$50.99**

E-mail: sales@equipspares.com

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Product Page:

<https://www.equipspares.com/product/u40g12ms1a5-53j652-nidec-12vdc-40mm-3-wire-axial-fan>

Product Description

The Nidec U40G12MS1A5-53J652 is a precision-engineered DC Axial Fan designed for compact thermal management applications requiring reliable airflow and low acoustic signatures. Utilizing advanced brushless DC motor technology, this unit optimizes aerodynamic efficiency while minimizing power consumption, drawing only 0.03A at 12VDC. The 40mm frame construction ensures structural rigidity and seamless integration into high-density electronic enclosures. Engineered with a specialized bearing system, it reduces friction and heat generation, thereby extending operational service life. This cooling solution effectively lowers thermal impedance in sensitive components, making it an ideal choice for maintaining system stability in industrial and commercial electronics where space is at a premium and reliability is paramount.

Model Number: U40G12MS1A5-53J652

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Product Type: DC Axial Fan

Rated Voltage: 12VDC

Voltage Range: 10.2 - 13.8 VDC

Rated Current: 0.03 A

Power Consumption: 0.36 W

Rated Speed: 4200 RPM (Nominal)

Bearing Type: Sleeve Bearing

Max. Air Flow: 4.5 CFM (7.6 m³/h)
Max. Static Pressure: 2.1 mmH₂O (20.6 Pa)
Dimensions: 40 x 40 x 10 mm
Weight: 18 g
Life Expectancy: 30,000 Hours at 40°C
Termination: 3-Wire (Lead Wire)
Speed Control: Tachometer Output (Frequency Generator)
Housing Material: PBT (UL94V-0)
Impeller Material: PBT (UL94V-0)
Operating Temperature: -10°C to +70°C
Storage Temperature: -40°C to +70°C
Noise Level: 18.0 dB(A)
Direction of Rotation: Counter-clockwise (Viewed from front)
Mounting Orientation: Any
Motor Protection: Impedance Protected

The U40G12MS1A5-53J652 is frequently deployed in compact electronic assemblies where internal airflow is critical for component longevity. Common implementations include network switches, small form-factor power supplies, and DVR surveillance systems where silent operation is required. The U40G12MS1A5-53J652 ensures consistent cooling for chipsets and VRMs in tight enclosures without introducing significant acoustic noise. Additionally, this model serves as an effective replacement in home automation hubs and specialized medical instrumentation requiring precise thermal regulation.

Supplemental Images

