

04010SS-12L-AA-YY NMB 12V 0.06A 40x40x10mm 4010 DC Axial Fan

SKU: 600909272809

Price: \$16.99

Categories: Fans

Tags: NMB

Product Link:

<https://www.electspares.com/product/04010ss-12l-aa-yy-nmb-12v-0-06a-40x40x10mm-4010-dc-axial-fan/>

Product Description

The NMB 04010SS-12L-AA-YY is a high-performance 12 V industrial axial fan with dimensions of 40 x 40 x 10 mm, purpose-built to deliver elite-level thermal cooling in high-resistance airflow paths. This unit features a heavy-duty brushless DC motor capable of sustaining a 0.72 W power input to drive its specialized 5-blade impeller at a consistent 4500 RPM. Engineered specifically for air displacement in micro-enclosures, it utilizes a 10 mm ultra-slim housing to provide effective cooling where standard 20 mm fans cannot fit. The mechanical design relies on a precision-shielded sleeve bearing system and a fiberglass-reinforced PBT housing to ensure 30,000 hours of continuous operation at a 25 °C ambient temperature. Featuring a simplified 2-wire electrical interface for direct power connection, this fan is a critical component for compact networking switches, medical diagnostic tools, and handheld electronics where space-saving design and quiet operation are mandatory.

04010SS-12L-AA-YY Fan Parameters

Manufacturer: NMB-MAT (MinebeaMitsumi)

Model Number: 04010SS-12L-AA-YY

Series: 04010SS Series

Industry Size Code: 4010

Type: DC Axial Fan

Bearing Type: Sleeve Bearing

Nominal Voltage: 12 VDC

Voltage Range: 10.2 - 13.8 VDC

Starting Voltage: 7.0 VDC

Dimensions: 40 x 40 x 10 mm

Weight: 15 g

[Electrical Data]

Input Power: 0.72 W

Nominal Current: 0.06 A

Max. Current: 0.09 A (Peak during startup)

Nominal Speed: 4500 RPM (Tolerance $\pm 15\%$)

Motor Design: Brushless DC Motor

Signal Output: None (2-Wire configuration)

Motor Protection: Auto Restart, Polarity Protection

Insulation Class: Class E

Insulation Resistance: >10M ohm at 500 VDC

Dielectric Strength: 700 VAC for 1 minute

Termination: 2-Lead wires (UL1007, AWG 26, Red/Black)

[Performance & Acoustics]

Max. Air Flow: 4.24 CFM (7.2 m³/h / 0.12 m³/min)

Max. Static Pressure: 1.84 mmH₂O (18.0 Pa / 0.07 inH₂O)

Sound Pressure Level: 22.0 dB(A) (Measured at 1 meter)

Number of Blades: 5

Direction of Rotation: Clockwise (viewed toward rotor)

Airflow Direction: Intake over struts

[Materials & Construction]

Frame Material: Plastic (PBT reinforced with 30% glass fiber, UL94V-0)

Impeller Material: Plastic (PBT reinforced with 15% glass fiber, UL94V-0)

Installation Position: Any

Degree of Protection: IP20

[Reliability & Safety Standards]

Min. Ambient Temperature: -10 °C

Max. Ambient Temperature: 70 °C

Storage Temperature: -40 °C - 70 °C

Life Expectancy (L10): 30,000 hours at 25 °C

Standard Compliance: UL 507, CSA C22.2, EN 60950-1, RoHS

Approval Agency: UL, CUL, TUV, CE

Application

The NMB 04010SS-12L-AA-YY axial fan is used in compact networking switches, medical diagnostic sensors, handheld electronic devices, micro-projectors, and small-form-factor power supplies.

Product Images



Scan for product details:



