

2004KL-04W-B50-L02 NMB 12VDC 50x50x10mm Axial Fan Datasheet



Brand: NMB

SKU: [968692955228](#)

Category: Axial & Centrifugal Fans

Price: **\$14.99**

E-mail: sales@equipspares.com

Web: <https://www.equipspares.com>

Product Page:

<https://www.equipspares.com/product/2004kl-04w-b50-l02-nmb-12vdc-50x50x10mm-axial-fan>

Product Description

The NMB 2004KL-04W-B50-L02 is a high-precision DC axial fan designed by MinebeaMitsumi (NMB-MAT) for critical thermal management applications. This unit incorporates advanced aerodynamic impeller geometry housed within a reinforced PBT frame, optimizing the balance between airflow volume and static pressure generation. Central to its durability is a dual ball bearing architecture, which significantly reduces friction coefficient and thermal impedance compared to sleeve bearing alternatives, ensuring operational stability under continuous load. The fan features a compact 10mm profile, making it an ideal solution for high-density electronic enclosures where structural rigidity and efficient heat dissipation are paramount.

Model Number: 2004KL-04W-B50-L02

Brand: NMB-MAT (MinebeaMitsumi)

Product Type: DC Axial Fan

Rated Voltage: 12 VDC

Voltage Range: 6.0 - 13.8 VDC

Rated Current: 0.14 A

Input Power: 1.68 W

Rated Speed: 5500 RPM

Bearing Type: Dual Ball Bearing

Max. Air Flow: 13.0 CFM (22.1 m³/h / 0.37 m³/min)

Max. Static Pressure: 3.5 mmH₂O (34.3 Pa / 0.14 inH₂O)

Noise Level: 32.0 dBA

Dimensions: 50 x 50 x 10 mm

Weight: 20 g

Housing Material: PBT Plastic (UL94V-0)

Impeller Material: PBT Plastic (UL94V-0)

Termination: 2 Lead Wires (Red +, Black -)

Operating Temperature: -10°C to +70°C

Storage Temperature: -40°C to +70°C

Life Expectancy: 60,000 Hours (at 25°C)

Protection: Auto Restart / Polarity Protection

Insulation Resistance: 10M Ohm min. at 500VDC

Dielectric Strength: 700VAC for 1 sec

The 2004KL-04W-B50-L02 is specifically engineered for space-constrained industrial and IT environments. It is widely deployed in 1U server racks, network switches, and compact power supply units where vertical clearance is limited. Additionally, the 2004KL-04W-B50-L02 serves as a critical cooling component in medical diagnostic equipment and telecommunications hardware, providing consistent airflow to prevent thermal throttling in sensitive integrated circuits.

Supplemental Images

