

109R0812H401 Sanyo Denki 12V 0.13A 80mm 8025 DC Axial Fan

SKU: 109R0812H401

Price: \$16.99

Categories: Fans

Tags: Sanyo Denki

Product Link:

<https://www.elecspares.com/product/109r0812h401-sanyo-denki-12v-0-13a-80mm-8025-dc-axial-fan/>

Product Description

The Sanyo Denki 109R0812H401 is a high-performance 12 V industrial axial fan with dimensions of 80 x 80 x 25 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 1.56 W power input to drive its specialized 7-blade impeller at a consistent 2900 RPM. Engineered specifically for air displacement in standard-profile enclosures, it utilizes a 25 mm housing to provide balanced pressure and airflow for mission-critical hardware. The mechanical design relies on precision dual ball bearings and a fiberglass-reinforced PBT housing to ensure 60,000 hours of continuous operation at a 40 °C ambient temperature. Featuring a robust 3-wire electrical interface with a dedicated Tachometer (FG) output for real-time speed monitoring, this fan is a critical component for server racks, power supply cooling, and industrial automation where long-term reliability and precise system feedback are mandatory.

109R0812H401 Fan Parameters

Manufacturer: Sanyo Denki (San Ace 80)

Model Number: 109R0812H401

Series: 109R Series (Ribbed Frame Type)

Industry Size Code: 8025

Type: DC Axial Fan

Bearing Type: Dual Ball Bearing

Nominal Voltage: 12 VDC

Voltage Range: 10.2 - 13.8 VDC

Starting Voltage: 7 VDC

Dimensions: 80 x 80 x 25 mm

Weight: 110 g

[Electrical Data]

Input Power: 1.56 W

Nominal Current: 0.13 A

Max. Current: 0.18 A (Peak startup current)

Nominal Speed: 2900 RPM (Tolerance $\pm 10\%$)

Motor Design: Brushless DC Motor (4-pole)

Signal Output: FG (Frequency Generator / Tachometer)

Motor Protection: Locked Rotor Protection, Reverse Polarity Protection

Insulation Class: Class E

Insulation Resistance: $>10M$ ohm at 500 VDC

Dielectric Strength: 500 VAC for 1 minute

Termination: 3-Lead wires (UL1007, AWG 24, Red/Black/Yellow)

[Performance & Acoustics]

Max. Air Flow: 38.1 CFM (64.8 m³/h / 1.08 m³/min)

Max. Static Pressure: 4.18 mmH₂O (41.0 Pa / 0.17 inH₂O)

Sound Pressure Level: 29 dB(A) (Measured at 1 m)

Number of Blades: 7

Direction of Rotation: Clockwise (Viewed toward rotor)

Airflow Direction: Intake over struts (Exhaust toward label)

Mode of Operation: S1 (Continuous operation)

[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: -30 °C - 70 °C

Life Expectancy (L10): 60,000 hours at 40 °C (35,000 hours at 60 °C)

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

Approval Agency: UL, CUL, TUV, CE

Application

The Sanyo Denki 109R0812H401 axial fan is used in industrial server chassis, telecommunications base stations, switching power supplies, medical diagnostic equipment, and automated control cabinets.

Product Images



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