FD1250-S1012C ARX 12VDC 50x50x15mm Ceramic Bearing Axial Fan Datasheet

Brand: ARX

SKU: 726245146170

Category: Axial & Centrifugal Fans

Price: **$14.99**

E-mail: sales@equipspares.com

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Product Page:
https://www.equipspares.com/product/fd1250-s1012c-arx-12vdc-50x50x15mm-ceramic-bearing-axial-fan

Product Description

The ARX FD1250-S1012C is a precision-engineered DC Axial Fan designed for critical thermal management applications requiring sustained reliability and compact integration. Utilizing ARX's proprietary CeraDyna bearing technology, this unit employs a sintered ceramic shaft and sleeve to significantly reduce friction coefficients and minimize thermal impedance compared to traditional ball or sleeve bearing systems. The 12VDC brushless motor is housed within a reinforced thermoplastic frame, ensuring structural rigidity and vibration dampening during high-speed operation. Engineered for optimal airflow efficiency, the aerodynamic blade profile maximizes static pressure delivery while maintaining acoustic stability. This component is specifically calibrated for long-term durability, making it an ideal solution for power supply units and compact electronic enclosures where maintenance accessibility is limited and continuous operation is mandatory.

Model Number: FD1250-S1012C
Brand: ARX
Product Type: DC Axial Fan
Rated Voltage: 12VDC
Voltage Range: 10.2 - 13.8 VDC
Rated Current: 0.17 A
Power Consumption: 2.04 W
Rated Speed: 5000 RPM

Bearing Type: CeraDyna (Ceramic)
Max. Air Flow: 12.5 CFM (21.2 m^3/h)
Max. Static Pressure: 3.8 mmH_2O (37.2 Pa)
Dimensions: 50 x 50 x 15 mm
Weight: 30 g
Life Expectancy: 60,000 Hours @ 40°C
Noise Level: 28 dBA
Housing Material: PBT (UL94V-0)
Impeller Material: PBT (UL94V-0)
Termination: 2-Wire Lead
Operating Temperature: -10°C to +70°C
Storage Temperature: -40°C to +70°C
Motor Protection: Impedance Protected
Dielectric Strength: 500VAC for 1 Min
Insulation Resistance: 10M Ohm at 500VDC

The FD1250-S1012C is frequently integrated into compact power conversion systems, including battery chargers and industrial power supply units where space constraints demand a low-profile thermal solution. Additionally, the FD1250-S1012C serves as a critical cooling component in small form-factor telecommunications equipment and network appliances, ensuring component longevity by effectively dissipating heat generated by rectifiers and transformers. Its robust ceramic bearing design also makes it suitable for continuous-duty applications in automated machinery control panels.

Supplemental Images