## **AMCHARD**

# **1** 1W~5W Non-isolated AC-DC Converter

**QOx-K3Bxx Series** 

QO01~05-K3Bxx Series is a 1W~5W non-isolated AC-DC converter in a compact SIP package, designed for industrial, commercial, and critical applications. Its technical manual highlights several competitive advantages that make it stand out in the market.











#### **Key Features**

### 1. Wide Input Voltage Range for Global Compatibility

- Input Voltage Range: 85~305VAC / 70~430VDC
- Typical Efficiency: Up to 77%
- Standby Power: Only 0.1W (Typ.)

#### 2. Robust Protection & High Reliability

- OCP, short-circuit protection, ensuring system safety.
- MTBF: >1,000,000 hours
- ➤ Operating Temperature: -40°C to +85°C



Smaller than a coin in size

## 3. Compliance with International Safety & EMC Standards

- > Safety Certification: IEC/EN 62368-1
- EMC Performance: Meets CISPR32/
   EN55032 Class B (with external circuit)

#### 4. Flexible EMC Optimization Solutions

- Basic Circuit: Includes mandatory components for stable operation.
- Enhanced Circuit: Optional CX, RX components for EN55032 Class B compliance, suitable for high-EMC environments.

#### Selection guide

Model Number	Output Power [W]	Output Voltage [VDC]	Output Current [mA] Max.	Efficiency [%] Typ.	Capacitive Load [uF] Max.
QO01-K3B05	1	5	200	60	500
QO03-K3B12	3	12	250	73	330
QO04-K3B12	4	12	330	75	160
QO05-K3B15	5	15	330	76	160
QO05-K3B18	5	18	280	77	160

#### **Typical Applications**

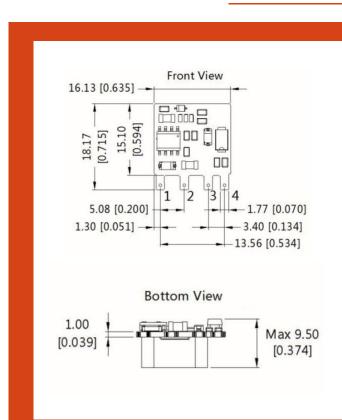


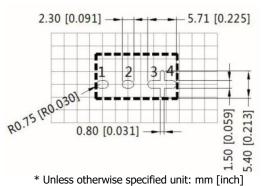






#### **Dimensions and Pin Functions**





- \* General tolerance: ±1.00 [±0.040]
- \* Pin thickness: ±0.10 [±0.004] \* Footprint grid 2.54 x 2.54 mm

#### **Pin Definition**

Pin #	Single Out		
1	AC (L)		
2	+V (CAP)		
3	AC (N) / -VOUT		
4	+VOUT		

## **AMCHARD**

#### **GUANGZHOU AMCHARD-POWER ELECTRONIC CO., LTD.**

Mail: info@amchard-power.com

Teams: 15764145@qq.com

Website: www.amchard-power.com

