

TECHNICAL DATASHEET

# 27W Fixed Blade USB-C Charger with Power Delivery 3.0 - UK



## Applications

- Mobile Phones
- Networking Devices
- Tablets

## Features

- **USB Type-C**
- **Power Delivery 3.0 Compliance**
- **Fixed Blade**
- **Ecodesign/ErP Lot 7 (EU) 2019/1782 Compliance**
- **CoC Version 5 Tier 2 Compliance**
- **Limited Power Source (LPS)**
- **Class B EMI**
- **OVP and short circuit protection**

## Safety Standards



## Dimensions

88.0 x 46.0 x 31.0 mm  
(3.46 x 1.81 x 1.22 inch)

## Specifications

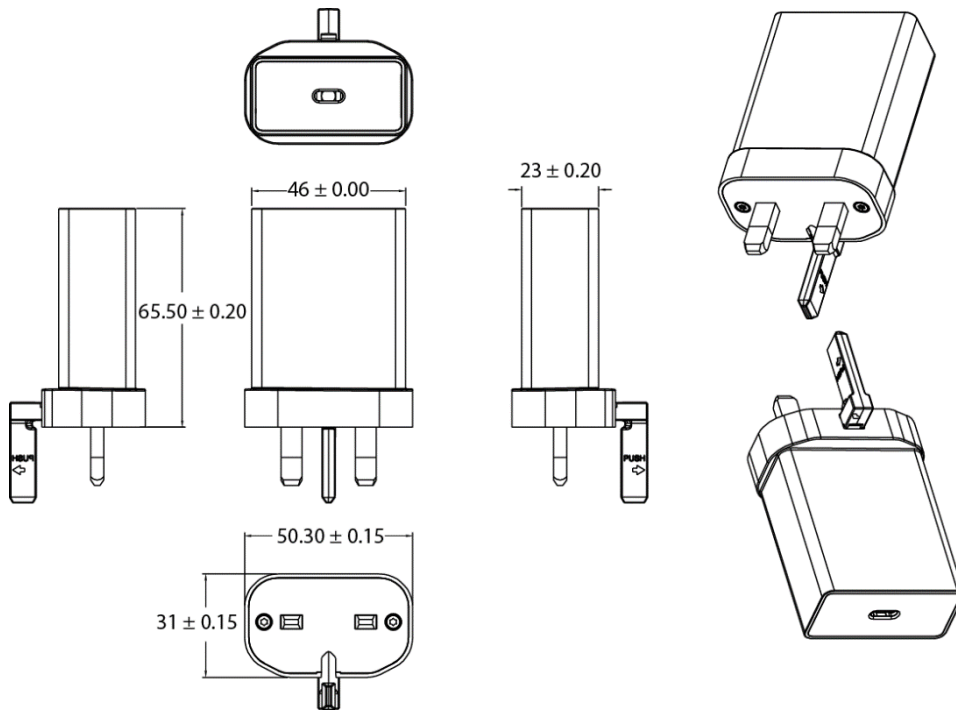
### AQ27K Specifications<sup>1</sup>

| Model                    |                                           | AQ27K-59A-H <sup>2</sup>                                                                                                                                                | AQ27K-59CFA-H <sup>2</sup>                          |
|--------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Output                   | DC Output Voltage                         | 5.0V/9.0V                                                                                                                                                               | 5.0V/9.0V/12.0V/15.0V                               |
|                          | Max Current                               | 3.0A/3.0A                                                                                                                                                               | 3.0A/3.0A/2.25A/1.8A                                |
|                          | Output Power                              | 18.0W/27.0W                                                                                                                                                             | 18.0W/27.0W/27.0W/27.0W                             |
|                          | Regulation                                | ± 5%                                                                                                                                                                    |                                                     |
|                          | Ripple & Noise P-P(max) <sup>3</sup>      | 200mV                                                                                                                                                                   |                                                     |
| Input                    | AC Input Voltage Range                    | 90 to 264VAC                                                                                                                                                            |                                                     |
|                          | AC Input Frequency                        | 47 to 63Hz                                                                                                                                                              |                                                     |
|                          | Input Current                             | 0.8A (RMS) max at 100VAC                                                                                                                                                |                                                     |
|                          | No Load Power Consumption at 115VAC Input | 0.075W                                                                                                                                                                  |                                                     |
|                          | No Load Power Consumption at 230VAC Input | 0.029W                                                                                                                                                                  |                                                     |
|                          | 115VAC Average Efficiency <sup>4</sup>    | 5V: 87.86%, 9V: 89.29%                                                                                                                                                  | 5V: 87.86%, 9V: 89.29%,<br>12V: 89.54%, 15V: 89.26% |
|                          | 230VAC Average Efficiency <sup>4</sup>    | 5V: 86.53%, 9V: 88.86%                                                                                                                                                  | 5V: 86.53%, 9V: 88.86%,<br>12V: 89.17%, 15V: 88.84% |
|                          | 230VAC 10% Load Efficiency <sup>4</sup>   | 5V: 80.44%, 9V: 82.21%                                                                                                                                                  | 5V: 80.44%, 9V: 82.21%,<br>12V: 80.64%, 15V: 78.2%  |
|                          | Leakage Current                           | 65uA max at 250VAC 50Hz                                                                                                                                                 |                                                     |
| Protection               | Over-Voltage                              | Auto-recover. 130% max                                                                                                                                                  |                                                     |
|                          | Over-current                              | Auto-recover. Trip point is less than 130% of I <sub>o</sub>                                                                                                            |                                                     |
|                          | Short Circuit                             | Auto-recover                                                                                                                                                            |                                                     |
|                          | Over Temperature                          | Latch off. No damage.                                                                                                                                                   |                                                     |
| Environmental            | Operating Temperature                     | 0°C to +40°C                                                                                                                                                            |                                                     |
|                          | Non-Operating Temperature                 | -30° to +85°C                                                                                                                                                           |                                                     |
|                          | Operating Humidity                        | 10% to 90% RH                                                                                                                                                           |                                                     |
| Safety Approvals and EMC | Dielectric Withstand (HI-POT)             | Primary to Secondary: 3000VAC for 1min, 3mA                                                                                                                             |                                                     |
|                          | Insulation Resistance                     | Primary to Secondary: >100M ohm for 500VDC                                                                                                                              |                                                     |
|                          | Standards                                 | IEC 62368-1                                                                                                                                                             |                                                     |
|                          | EMI Emissions                             | EN 55032/CISPR 32 Class B Conducted and Radiated                                                                                                                        |                                                     |
|                          | Harmonic Current Emissions                | IEC 61000-3-2                                                                                                                                                           |                                                     |
|                          | Voltage Fluctuations & Flicker            | IEC 61000-3-3                                                                                                                                                           |                                                     |
|                          | Immunity                                  | EN 55035/CISPR 35:<br>IEC 61000-4-2 (Contact: ±8KV, Air: ±15KV),<br>IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (±1kV),<br>IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 |                                                     |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Mechanical | Dimensions (L x W x H)                                                                                                                                                                                                                                                                                                                                                                                                                                        | 88.0mm (3.46in) x 46.0mm (1.81in) x 31.0mm (1.22in) |
|            | DC Output Connector                                                                                                                                                                                                                                                                                                                                                                                                                                           | USB-C                                               |
| Notes      | <ol style="list-style-type: none"><li>1. The specifications defined are at ambient temperature of 25°C, unless otherwise specified.</li><li>2. Special order item. Minimum order quantity applies.</li><li>3. 20MHz bandwidth frequency oscilloscope, add a 0.1μF multilayer Cap. and Low ESR Electrolytic Cap. (10μF) at output connector terminals (nominal line voltage, full load).</li><li>4. Efficiency is measured after 30 minutes burn-in.</li></ol> |                                                     |

# Outline Drawing

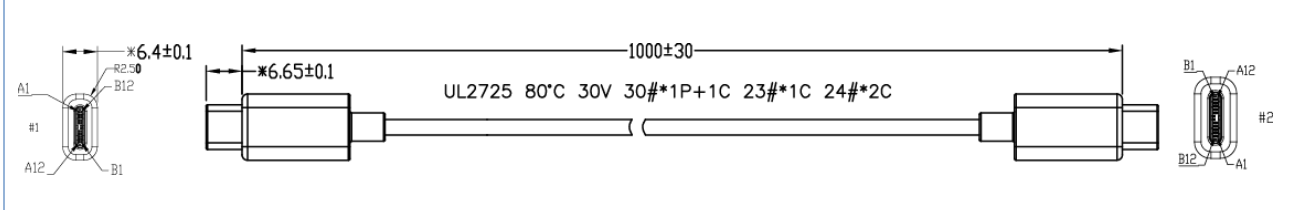
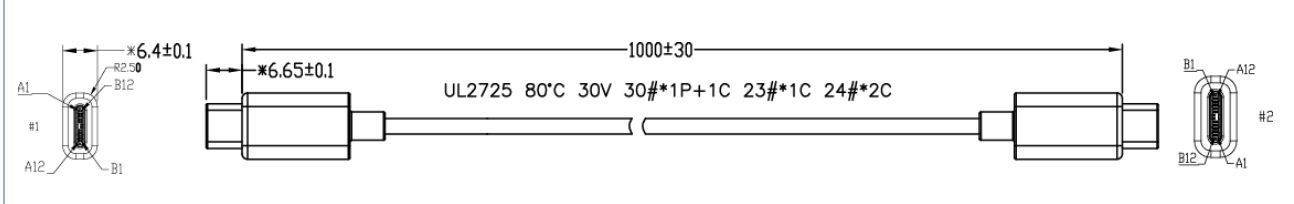
## AQ27K Outline Drawing



## USB Cables

### USB Cables – Sold Separately

Unit: mm

|                                                                                    |                                                                                    |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Part no: UES-1001A160                                                              | Desc: Low Drop Type-C USB Cable – 1 Meter – 23AWG on Power – 30AWG on Data - Black |
|  |                                                                                    |
| Part no: UES-1003A160                                                              | Desc: Low Drop Type-C USB Cable - 1 Meter – 23AWG on Power – 30AWG on Data - White |
|  |                                                                                    |

## Phihong Locations



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