

SERIES: EP5A 5W USB | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- 5 W power
- universal input (90~264 Vac)
- single regulated 5 V output
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals
- level V efficiency



| MODEL | output voltage (Vdc) | output current max (A) | output power max (W) | ripple and noise ¹ max (mVp-p) | efficiency level |
|-------------|-------------------------|---------------------------|-------------------------|--|------------------|
| EP5A050100U | 5 | 1 | 5 | 350 | V |

Notes: 1. At full load, 20 MHz bandwidth oscilloscope, each output terminated with 10 μ F aluminum electrolytic and 0.1 μ F ceramic capacitors.

PART NUMBER KEY

EP5A050100U - I38 - EJ - CXX

Base Number
example of 5 Vdc, 1 A

USB Type A inlet

Factory Designation

Reserved for Custom Configurations

INPUT

| parameter | conditions/description | min | typ | max | units |
|-----------------|------------------------|-----|-----|------|-------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | at full load | | | 0,15 | A |
| leakage current | | | | 0.25 | mA |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|-----------------|---------------------------------|-----|-----|-----|-------|
| line regulation | | | ±5 | | % |
| load regulation | from +20% to +80% load | | ±10 | | % |
| start-up | | | | 2 | s |
| hold-up | at 115 Vac/50 Hz, 80% max. load | 10 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|---|-----|-----|-----|-------|
| over voltage protection | output shut down | | | | |
| over current protection | automatic power decrease, auto recovery | | | 200 | % |
| short circuit protection | output terminal protected | | | | |

SAFETY & COMPLIANCE

| parameter | conditions/description | min | typ | max | units |
|----------------------|---|---------|-----|-----|-------|
| isolation voltage | input to output at 10 mA for 2 seconds | 3,000 | | | Vac |
| isolation resistance | input to output at 500 Vdc | 10 | | | MΩ |
| safety approvals | UL/cUL, PSE, LPS | | | | |
| EMI/EMC | FCC Part 15B Class B, CISPR22 EN55022 class B | | | | |
| MTBF | as per Telcordia SR-332 at full load, 25°C | 300,000 | | | hrs |
| RoHS compliant | yes | | | | |

ENVIRONMENTAL

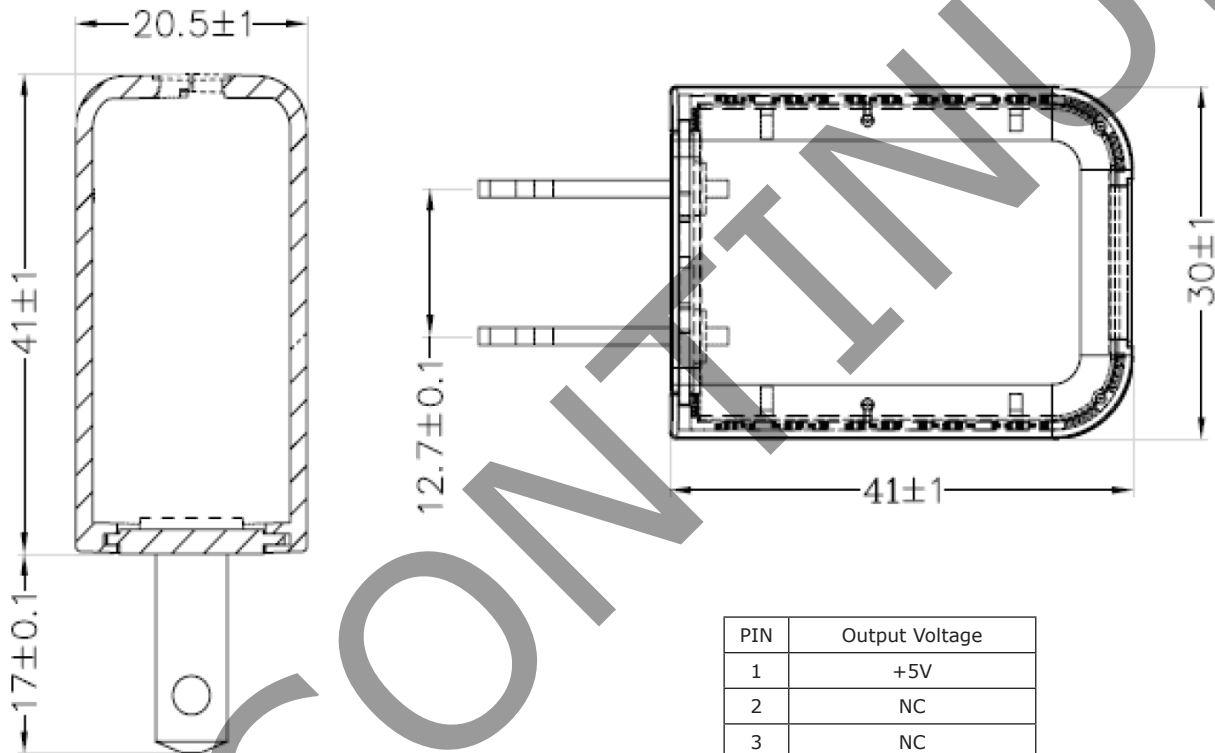
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -25 | | 85 | °C |
| operating humidity | | 10 | | 95 | % |
| storage humidity | | 10 | | 95 | % |

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 41 x 30 x 20.5 | | | | mm |
| input plug | US 2-pin | | | | |

MECHANICAL DRAWING

units: mm
tolerance: ±1



| PIN | Output Voltage |
|-----|----------------|
| 1 | +5V |
| 2 | NC |
| 3 | NC |
| 4 | GND |

REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 08/20/2013 |

The revision history provided is for informational purposes only and is believed to be accurate.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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