

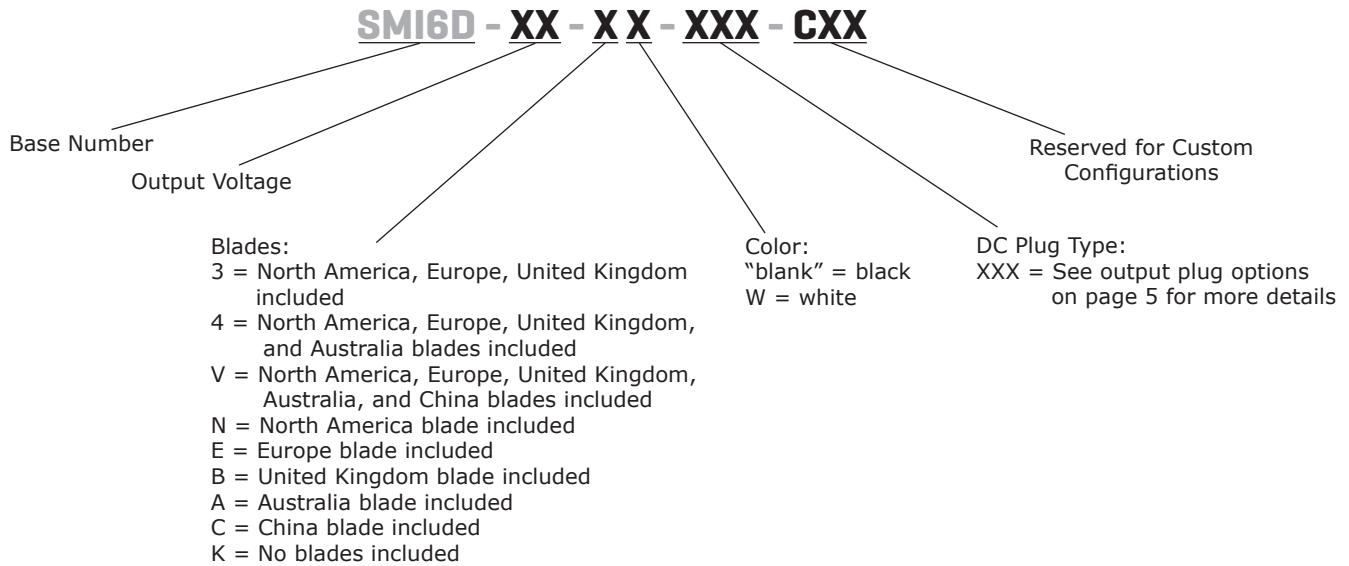
SERIES: SMI6D | DESCRIPTION: AC-DC POWER SUPPLY
FEATURES

- up to 6 W continuous power
- DoE Level VI efficiency
- interchangeable AC blades
- no load power consumption <0.1W
- universal input voltage range
- LPS rated
- over voltage and short circuit, and over current protections
- UL/cUL & CE safety approvals
- certified to UL/EN/IEC 62368-1



| MODEL | input voltage | input frequency | output voltage | output current | output power | ripple and noise ¹ | efficiency level ² | no load power consumption |
|-----------|---------------|-----------------|----------------|----------------|--------------|-------------------------------|-------------------------------|---------------------------|
| | range (Vac) | range (Hz) | nom (Vdc) | max (A) | max (W) | max (mVp-p) | typ (%) | typ (W) |
| SMI6D-5 | 90 ~ 264 | 47 ~ 63 | 5.0 | 1.0 | 5.0 | 100 | 73.62 | 0.1 |
| SMI6D-5B | 90 ~ 264 | 47 ~ 63 | 5.0 | 1.2 | 6.0 | 120 | 75.18 | 0.1 |
| SMI6D-5.9 | 90 ~ 264 | 47 ~ 63 | 5.9 | 1.0 | 5.9 | 120 | 75.05 | 0.1 |
| SMI6D-7.5 | 90 ~ 264 | 47 ~ 63 | 7.5 | 0.8 | 6.0 | 120 | 78.88 | 0.1 |
| SMI6D-9 | 90 ~ 264 | 47 ~ 63 | 9.0 | 0.66 | 5.94 | 150 | 78.97 | 0.1 |
| SMI6D-12 | 90 ~ 264 | 47 ~ 63 | 12.0 | 0.5 | 6.0 | 150 | 78.88 | 0.1 |

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF ceramic and 10 µF aluminum electrolytic capacitors.
2. Average efficiency is measured at 115V/60Hz and 230V/60Hz, 25%, 50%, 75%, and 100% load.

PART NUMBER KEY


INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|------------------------|-----|---------|------|-------|
| voltage | | 90 | 100~240 | 264 | Vac |
| frequency | | 47 | 50~60 | 63 | Hz |
| current | | | | 0.18 | A |
| leakage current | | | | 0.25 | mA |
| no load power consumption | | | | 0.1 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|-----------------|-------------------------------------|-----|-----|-----|-------|
| line regulation | | | ±5 | | % |
| load regulation | | | ±5 | | % |
| start-up time | at nominal input voltage, full load | | | 3 | s |
| rise time | | | | 50 | ms |
| hold-up time | at 100 Vac, full load | 8 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|--------------------------------|-----|-----|-----|-------|
| over voltage protection | clamped by internal protection | | | | % |
| over current protection | | 110 | | 200 | |
| short circuit protection | auto recovery | | | | |

SAFETY & COMPLIANCE

| parameter | conditions/description | min | typ | max | units |
|-------------------|---|---------|-------|-----|-------|
| isolation voltage | input to output at 5 mA for 1 minute | | 3,000 | | Vac |
| safety approvals | certified to 62368-1: UL, EN, IEC | | | | |
| EMI/EMC | EN 55032 Class B, FCC PART 15 Class B, CE | | | | |
| ESD | IEC 61000-4-2 contact: ±4 kV, air: ±8 kV, perf. Criteria A | | | | |
| radiated immunity | IEC 61000-4-3 frequency: 80 ~ 1000 MHz, field strength: 3V/M with 80% AM (1KHz), perf. Criteria A EN 61000-4-3, EN 55035 | | | | |
| EFT/burst | EN 61000-4-4 power line: 1 kV, signal line: 0.5 kV, perf. Criteria B | | | | |
| surge | power line: 1 kV, line to earth: 2 kV, 90°/-270° | | | | |
| MTBF | as per Telcordia SR-332 (Issue 3), at full load, 25°C | 300,000 | | | hours |
| RoHS | yes | | | | |

ENVIRONMENTAL

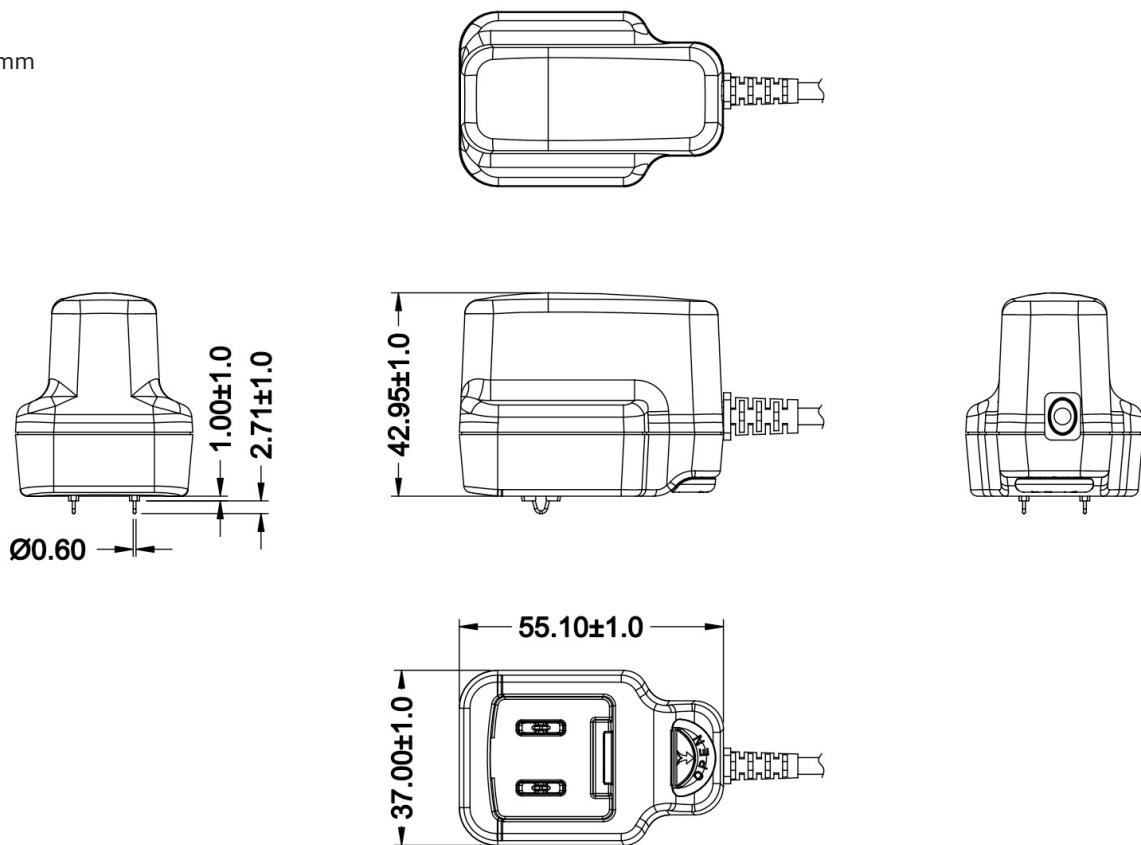
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 50 | °C |
| storage temperature | | -20 | | 80 | °C |
| operating humidity | non-condensing | 10 | | 90 | % |
| storage humidity | non-condensing | 10 | | 90 | % |

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|--------------------|---|-----|-----|-----|-------|
| dimensions | 55.1 x 37 x 42.95 | | | | mm |
| inlet plug | interchangeable blades (NA, EU, UK, AU, CN) | | | | |
| ac blade clip type | hidden clip | | | | |
| weight | | | | 60 | g |

MECHANICAL DRAWING

units: mm
tolerance: ± 1 mm



| INTERCHANGEABLE BLADES | | | | | |
|------------------------|---------------|----------|----------------|-----------|----------|
| BLADE DESIGNATOR | N | E | B | A | C |
| REGION | North America | Europe | United Kingdom | Australia | China |
| BLADE ACCESSORY | SMI-US-9 | SMI-EU-9 | SMI-UK-9 | SMI-AU-9 | SMI-CN-9 |
| BLADE | | | | | |

DC CORD

units: mm

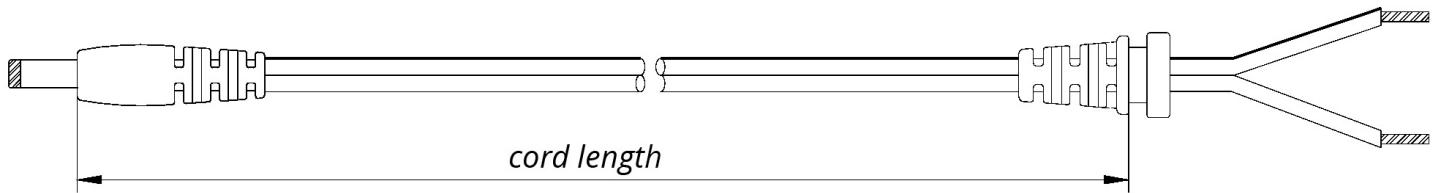


Table 1

| MODEL NO. | CABLE | CORD LENGTH |
|-----------|----------------|--------------|
| SMI6D-5 | UL2468, 24 AWG | 1,500 mm ±80 |
| SMI6D-5B | UL2468, 22 AWG | 1,500 mm ±80 |
| SMI6D-5.9 | UL2468, 24 AWG | 1,500 mm ±80 |
| SMI6D-7.5 | UL2468, 22 AWG | 1,500 mm ±80 |
| SMI6D-9 | UL2468, 24 AWG | 1,500 mm ±80 |
| SMI6D-12 | UL2468, 24 AWG | 1,500 mm ±80 |

Note: The AWG may vary based on the specific DC connector used.

DC PLUG TYPE PART NUMBER KEY

XXX

Plug Polarity:

P = Center Positive


N = Center Negative


Plug Code:
X = Choose a code from the options below

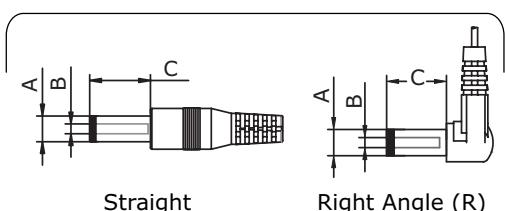
Plug Angle:
"blank" = Straight
R = Right Angle

| Plug Polarity | | Code | | Dimensions (mm) | | | Plug Angle | |
|----------------------|-------------|-------------|----------------------|------------------------|------|-----|-------------------|-------|
| Center Pos. | Center Neg. | Option | Type | A | B | C | Straight | Right |
| • | • | 5 | Standard | 5.5 | 2.1 | 9.5 | • | • |
| • | • | 6 | Standard | 5.5 | 2.5 | 9.5 | • | • |
| • | • | 7 | Standard | 3.5 | 1.35 | 9.5 | • | • |
| • | • | 8 | Standard | 3.8 | 1.35 | 9.5 | • | • |
| • | • | 9 | Standard | 3.8 | 1.05 | 9.5 | • | • |
| • | • | 10 | Locking ² | 5.5 | 2.1 | 9.5 | • | N/A |
| • | • | 11 | Locking ² | 5.5 | 2.5 | 9.5 | • | N/A |
| • | • | 13 | EIAJ-2 | 4.0 | 1.7 | 9.5 | • | • |
| • | • | 14 | EIAJ-3 | 4.75 | 1.7 | 9.5 | • | • |
| N/A | N/A | ST | | Stripped & Tinned | | | N/A | N/A |
| N/A | N/A | M | USB | Micro USB Type B | | | • | N/A |
| N/A | N/A | C | USB | USB Type C | | | • | N/A |

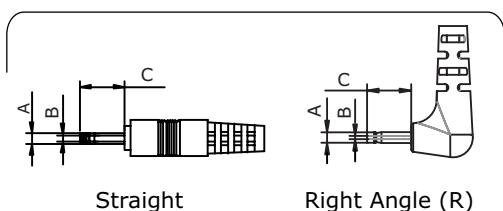
Note:

1. Tip positive
2. Maximum insertion depth is 10mm
3. Contact BEL for additional plug options

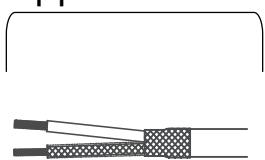
Standard



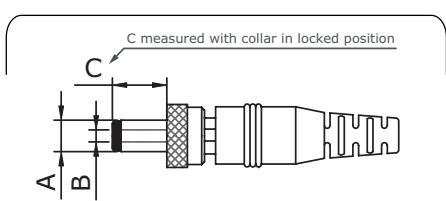
EIAJ



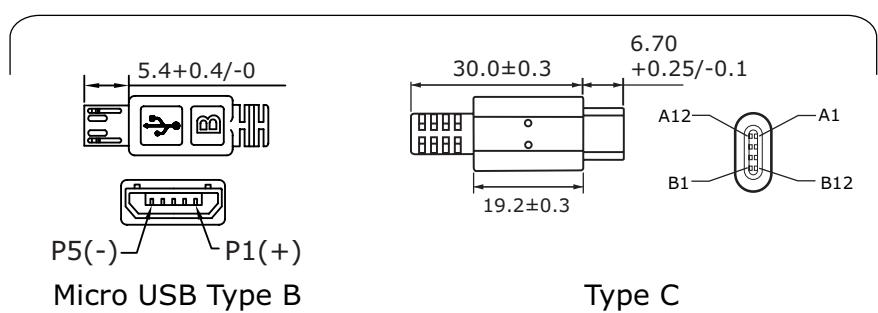
Stripped & Tinned



Locking



USB



belfuse.com

REVISION HISTORY

| rev. | description | date |
|------|-----------------|------------|
| 1.0 | initial release | 01/04/2026 |

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



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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.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.