

Model name

PP 15-48-5

Nominal output voltage
Nominal input voltage
Name of series Output power

Features

- Compact and single output DC-DC converter
Ultra-thin profile: 8mm
- Wide input voltage range
DC5V input: DC4.5 ~ 7.2V (PP25: 4.7V ~ 7.2V)
DC12V input: DC9 ~ 18V (PP1R5 ~ PP10: 8 ~ 16.5V)
DC24V input: DC18 ~ 36V (PP1R5 ~ PP10: 18 ~ 32V)
DC48V input: DC36 ~ 72V (PP1R5 ~ PP10: 32 ~ 63V)
- Operating temperature: -20 ~ +71°C
- Isolation between input and output
- PP15, PP25: Output voltage variable, on/off control
- 3 year warranty

Specifications

| | |
|---|--|
| 1. Input voltage range | DC5V input: DC4.5 ~ 7.2V (PP25: 4.7 ~ 7.2V) DC12V input: DC9 ~ 18V (PP1R5 ~ PP10: 8 ~ 16.5V) DC24V input: DC18 ~ 36V (PP1R5 ~ PP10: 18 ~ 32V) DC48V input: DC36 ~ 72V (PP1R5 ~ PP10: 32 ~ 63V) |
| 2. Output voltage range | Fixed (PP15, PP25: +5% available with external resistor) |
| 3. Cooling | Convection cooling |
| 4. Operating ambient temperature | -20 ~ +71°C PP1R5 ~ PP10: Output derating -20°C ~ +50°C: 100%, +71°C: 20% PP15, PP25: Output derating -20°C ~ +55°C: 100%, +71°C: 50% (5V input of PP25: Output derating -20°C ~ +50°C: 100%, +71°C: 50%) (48V input of PP25: output derating -20°C ~ +40°C: 100%, +71°C: 40%) |
| 5. Withstand voltage | Input-output, Input-case: 500VAC for 1 min. |
| 6. Functions | Over current protection, PP15, PP25: Remote on/off control & Over voltage protection |

Product lineup

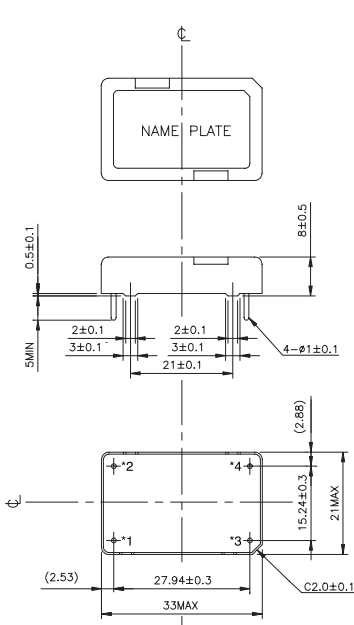
| Model name | Output voltage | Output current | Output power | UL | CSA | EN | |
|------------|----------------|----------------|--------------|-------|-----|----|---|
| PP1R5 | PP1R5-5-5 | 5V | 0.3A | 1.5W | | | |
| | PP1R5-5-12 | 12V | 0.12A | 1.44W | | | |
| | PP1R5-5-15 | 15V | 0.1A | 1.5W | | | |
| | PP1R5-12-5 | 5V | 0.3A | 1.5W | | | |
| | PP1R5-12-12 | 12V | 0.12A | 1.44W | | | |
| | PP1R5-12-15 | 15V | 0.1A | 1.5W | | | |
| | PP1R5-24-5 | 5V | 0.3A | 1.5W | | | |
| | PP1R5-24-12 | 12V | 0.12A | 1.44W | | | |
| | PP1R5-24-15 | 15V | 0.1A | 1.5W | | | |
| | PP1R5-48-5 | 5V | 0.3A | 1.5W | | | |
| | PP1R5-48-12 | 12V | 0.12A | 1.44W | | | |
| | PP1R5-48-15 | 15V | 0.1A | 1.5W | | | |
| PP3 | PP3-5-5 | 5V | 0.6A | 3.0W | | | |
| | PP3-5-12 | 12V | 0.24A | 2.88W | | | |
| | PP3-5-15 | 15V | 0.2A | 3.0W | | | |
| | PP3-12-5 | 5V | 0.6A | 3.0W | | | |
| | PP3-12-12 | 12V | 0.24A | 2.88W | | | |
| | PP3-12-15 | 15V | 0.2A | 3.0W | | | |
| | PP3-24-5 | 5V | 0.6A | 3.0W | ○ | ○ | ○ |
| | PP3-24-12 | 12V | 0.24A | 2.88W | ○ | ○ | ○ |
| | PP3-24-15 | 15V | 0.2A | 3.0W | ○ | ○ | ○ |
| | PP3-48-5 | 5V | 0.6A | 3.0W | ○ | ○ | ○ |
| PP6 | PP6-5-5 | 5V | 1.2A | 6.0W | | | |
| | PP6-5-12 | 12V | 0.5A | 6.0W | | | |
| | PP6-5-15 | 15V | 0.4A | 6.0W | | | |
| | PP6-12-5 | 5V | 1.2A | 6.0W | | | |
| | PP6-12-12 | 12V | 0.5A | 6.0W | | | |
| | PP6-12-15 | 15V | 0.4A | 6.0W | | | |
| | PP6-24-5 | 5V | 1.2A | 6.0W | | | |
| | PP6-24-12 | 12V | 0.5A | 6.0W | | | |
| | PP6-24-15 | 15V | 0.4A | 6.0W | | | |
| | PP6-48-5 | 5V | 1.2A | 6.0W | | | |
| | PP6-48-12 | 12V | 0.5A | 6.0W | | | |
| | PP6-48-15 | 15V | 0.4A | 6.0W | | | |

| Model name | Output voltage | Output current | Output power | UL | CSA | EN | |
|-------------|----------------|----------------|--------------|--------|-----|----|---|
| PP10 | PP10-5-5 | 5V | 1.6A | 8.0W | | | |
| | PP10-5-12 | 12V | 0.7A | 8.4W | | | |
| | PP10-5-15 | 15V | 0.6A | 9.0W | | | |
| | PP10-12-5 | 5V | 2.0A | 10.0W | | | |
| | PP10-12-12 | 12V | 0.9A | 10.8W | | | |
| | PP10-12-15 | 15V | 0.7A | 10.5W | | | |
| | PP10-24-5 | 5V | 2.0A | 10.0W | | | |
| | PP10-24-12 | 12V | 0.9A | 10.8W | | | |
| | PP10-24-15 | 15V | 0.7A | 10.5W | | | |
| | PP10-48-3.3 | 3.3V | 2.0V | 6.6W | | | |
| | PP10-48-5 | 5V | 2.0A | 10.0W | | | |
| | PP10-48-12 | 12V | 0.9A | 10.8W | | | |
| | PP10-48-15 | 15V | 0.7A | 10.5W | | | |
| | PP15 | PP15-12-5 | 5V | 2.4A | 12W | | |
| PP15-12-12 | | 12V | 1.3A | 15.6W | | | |
| PP15-12-15 | | 15V | 1.0A | 15W | | | |
| PP15-24-5 | | 5V | 2.4A | 12W | | | |
| PP15-24-12 | | 12V | 1.3A | 15.6W | | | |
| PP15-24-15 | | 15V | 1.0A | 15W | | | |
| PP15-48-3.3 | | 3.3V | 2.4A | 7.92W | | | |
| PP15-48-5 | | 5V | 2.4A | 12W | ○ | ○ | ○ |
| PP15-48-12 | | 12V | 1.3A | 15.6W | | | |
| PP15-48-15 | | 15V | 1.0A | 15W | | | |
| PP25 | PP25-5-3.3 | 3.3V | 3.0A | 9.9W | | | |
| | PP25-5-5.2 | 5.2V | 2.9A | 15.08W | | | |
| | PP25-12-5 | 5V | 4.0A | 20W | | | |
| | PP25-12-12 | 12V | 2.1A | 25.2W | ○ | ○ | ○ |
| | PP25-12-15 | 15V | 1.7A | 25.5W | | | |
| | PP25-24-5 | 5V | 4.0A | 20W | | | |
| | PP25-24-12 | 12V | 2.1A | 25.2W | ○ | ○ | ○ |
| | PP25-24-15 | 15V | 1.7A | 25.5W | | | |
| | PP25-48-3.3 | 3.3V | 5.0A | 16.5W | | | |
| | PP25-48-5 | 5V | 4.0A | 20W | ○ | ○ | ○ |
| | PP25-48-12 | 12V | 2.1A | 25.2W | ○ | ○ | ○ |
| PP25-48-15 | 15V | 1.7A | 25.5W | | | | |

○ : Safety standard approved

- Request customer specification for further details of specifications, outline, characteristics, etc. Read the instruction manual before usage.
- Contact us about delivery before ordering.

PP3

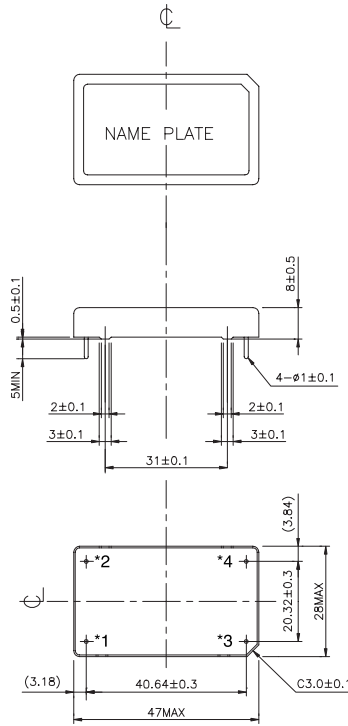


Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3 +V □ OUTPUT
- *4 -V □ OUTPUT

Case: Copper (Thickness 0.4mm)
Weight: 15g

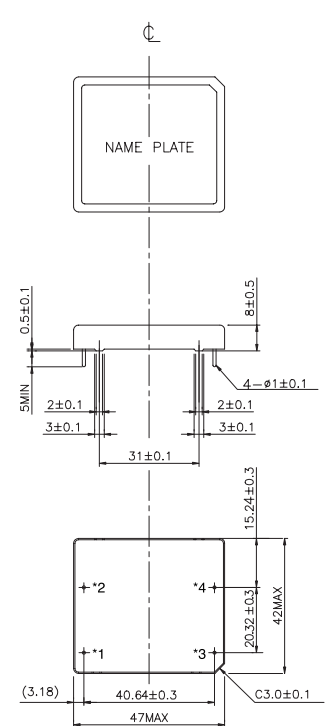
PP6



Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3 +V □ OUTPUT
- *4 -V □ OUTPUT

Case: Copper (Thickness 0.4mm)
Weight: 25g

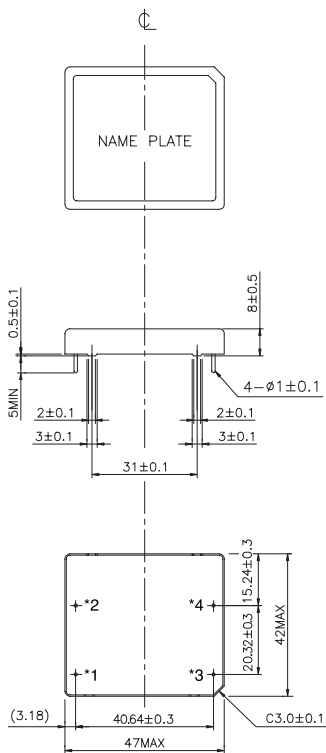


Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3 +V □ OUTPUT
- *4 -V □ OUTPUT

Case: Copper (Thickness 0.4mm)
Weight: 40g

PP10

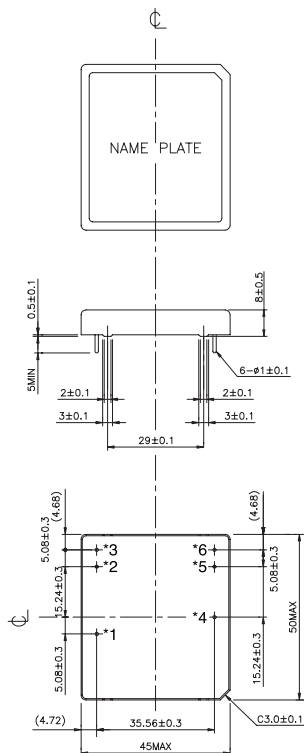


Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3 +V □ OUTPUT
- *4 -V □ OUTPUT

Case: Copper (Thickness 0.4mm)
Weight: 40g

PP15

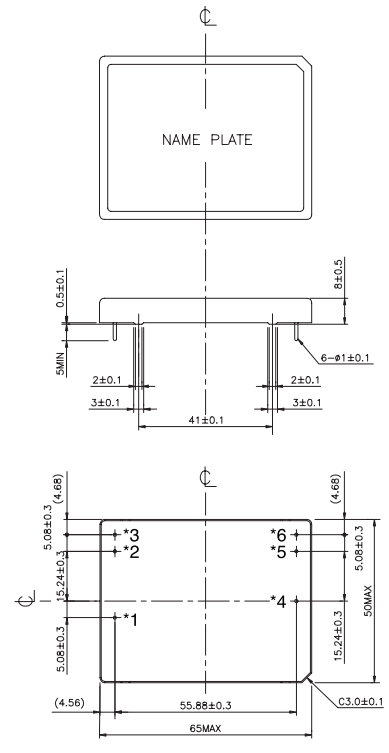


Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3 CNT
- *4 +V □ OUTPUT
- *5 -V □ OUTPUT
- *6 TRM

Case: Copper (Thickness 0.4mm)
Weight: 55g

PP25

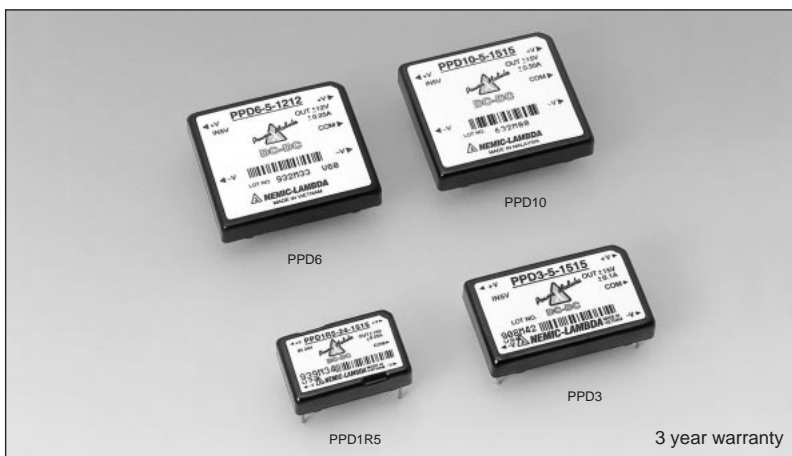


Terminal assignments

- *1 +V □ INPUT
- *2 -V □ INPUT
- *3CNT
- *4 +V □ OUTPUT
- *5 -V □ OUTPUT
- *6 TRM

Case: Copper (Thickness 0.4mm)
Weight: 65g

On-Board Type Power Supply



Model name

PPD 3-48-1212

Name of series Output power Nominal output voltage
Nominal input voltage

Features

- Compact and dual output DC-DC converter
Ultra-low profile: 8mm
- Wide input voltage range
DC5V input: DC4.5 ~ 7.2V
DC12V input: DC8 ~ 16.5V
DC24V input: DC18 ~ 32V
DC48V input: DC32 ~ 63V
- Operating temperature: -20 ~ +71°C
- Isolation between input and output
- 3 year warranty

Specifications

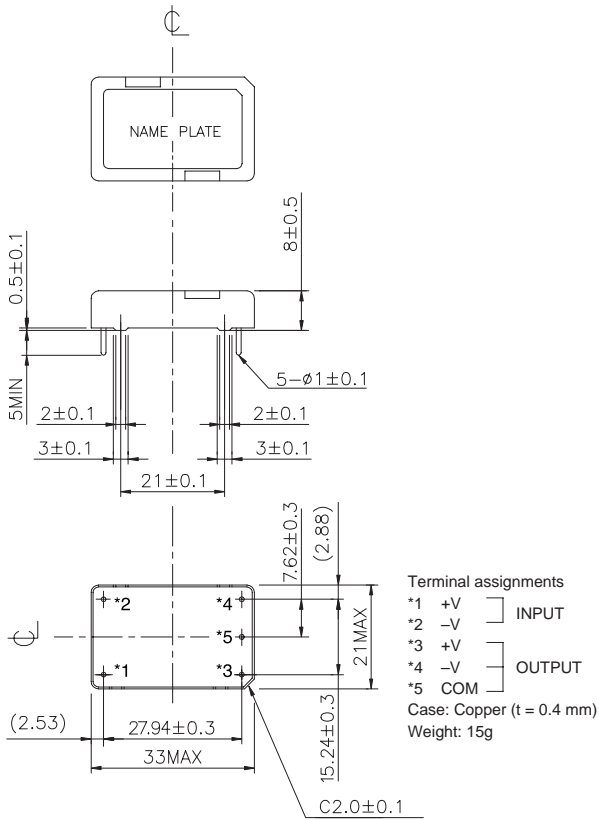
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|--|--|
| 1. Input voltage range | DC5V input: DC4.5 ~ 7.2V DC12V input: DC8 ~ 16.5V DC24V input: DC18 ~ 32V DC48V input: DC32 ~ 63V |
| 2. Output voltage range | Fixed |
| 3. Cooling | Convection cooling |
| 4. Operating ambient temperature (Standard mounting) | -20 ~ +71°C PPD1R5, PPD3: Output derating -20°C ~ +50°C: 100%, +71°C: 20% PPD6, PPD10: Output derating -20°C ~ +55°C: 100%, +71°C: 20% |
| 5. Withstand voltage | Input-output, Input-case: 500VAC for 1 min. |
| 6. Functions | Over voltage protection |

Product lineup

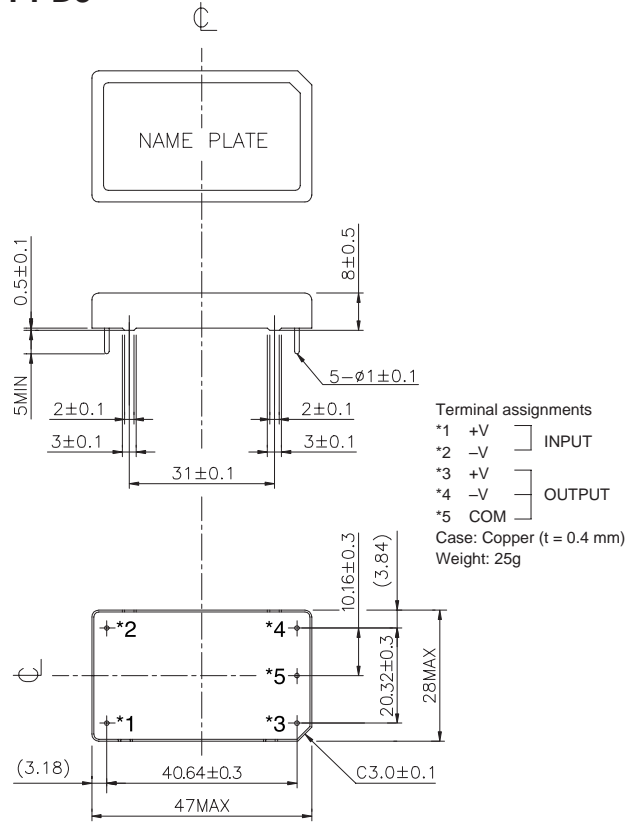
| Model name | | Output voltage | Output current | Output power |
|----------------|----------------|----------------|----------------|--------------|
| PPD1R5 | PPD1R5-5-1212 | ± 12V | ± 60mA | 1.44W |
| | PPD1R5-5-1515 | ± 15V | ± 50mA | 1.5W |
| | PPD1R5-12-1212 | ± 12V | ± 60mA | 1.44W |
| | PPD1R5-12-1515 | ± 15V | ± 50mA | 1.5W |
| | PPD1R5-24-1212 | ± 12V | ± 60mA | 1.44W |
| | PPD1R5-24-1515 | ± 15V | ± 50mA | 1.5W |
| | PPD1R5-48-1212 | ± 12V | ± 60mA | 1.44W |
| PPD1R5-48-1515 | ± 15V | ± 50mA | 1.5W | |
| PPD3 | PPD3-5-1212 | ± 12V | ± 120mA | 2.88W |
| | PPD3-5-1515 | ± 15V | ± 100mA | 3.0W |
| | PPD3-12-1212 | ± 12V | ± 120mA | 2.88W |
| | PPD3-12-1515 | ± 15V | ± 100mA | 3.0W |
| | PPD3-24-1212 | ± 12V | ± 120mA | 2.88W |
| | PPD3-24-1515 | ± 15V | ± 100mA | 3.0W |
| | PPD3-48-1212 | ± 12V | ± 120mA | 2.88W |
| PPD3-48-1515 | ± 15V | ± 100mA | 3.0W | |
| PPD6 | PPD6-5-1212 | ± 12V | ± 250mA | 6.0W |
| | PPD6-5-1515 | ± 15V | ± 200mA | 6.0W |
| | PPD6-12-1212 | ± 12V | ± 250mA | 6.0W |
| | PPD6-12-1515 | ± 15V | ± 200mA | 6.0W |
| | PPD6-24-1212 | ± 12V | ± 250mA | 6.0W |
| | PPD6-24-1515 | ± 15V | ± 200mA | 6.0W |
| | PPD6-48-1212 | ± 12V | ± 250mA | 6.0W |
| PPD6-48-1515 | ± 15V | ± 200mA | 6.0W | |
| PPD10 | PPD10-5-1212 | ± 12V | ± 350mA | 8.4W |
| | PPD10-5-1515 | ± 15V | ± 300mA | 9.0W |
| | PPD10-12-1212 | ± 12V | ± 450mA | 10.8W |
| | PPD10-12-1515 | ± 15V | ± 350mA | 10.5W |
| | PPD10-24-1212 | ± 12V | ± 450mA | 10.8W |
| | PPD10-24-1515 | ± 15V | ± 350mA | 10.5W |
| | PPD10-48-1212 | ± 12V | ± 450mA | 10.8W |
| PPD10-48-1515 | ± 15V | ± 350mA | 10.5W | |

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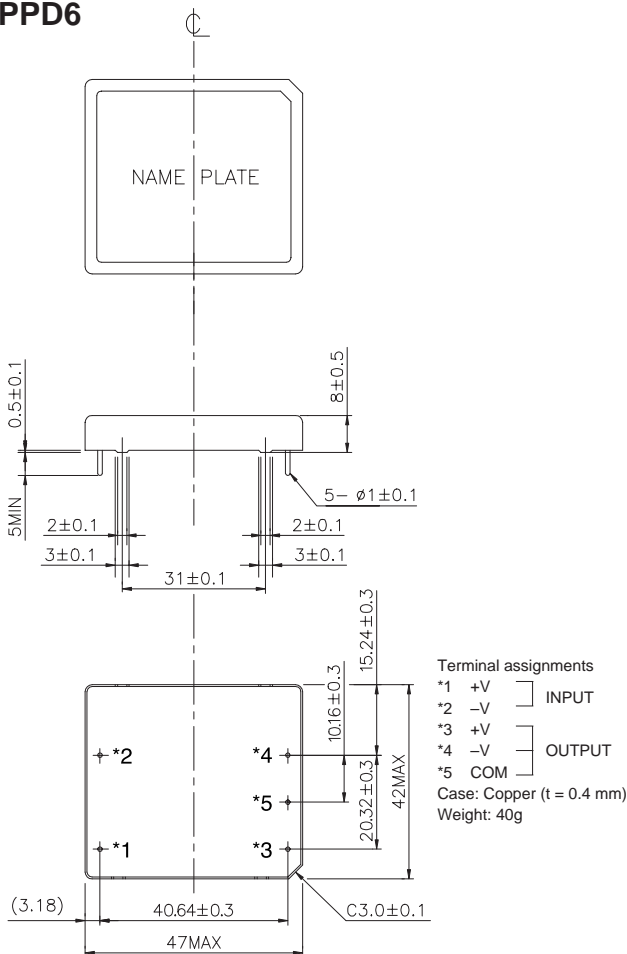
PPD1R5



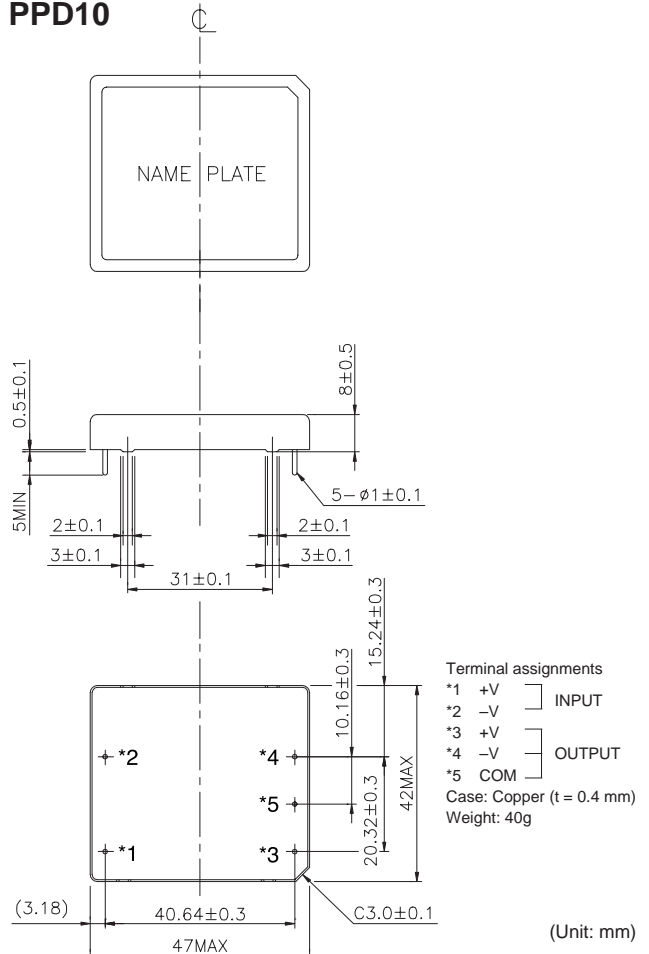
PPD3



PPD6



PPD10



(Unit: mm)

On-Board Type Power Supply