

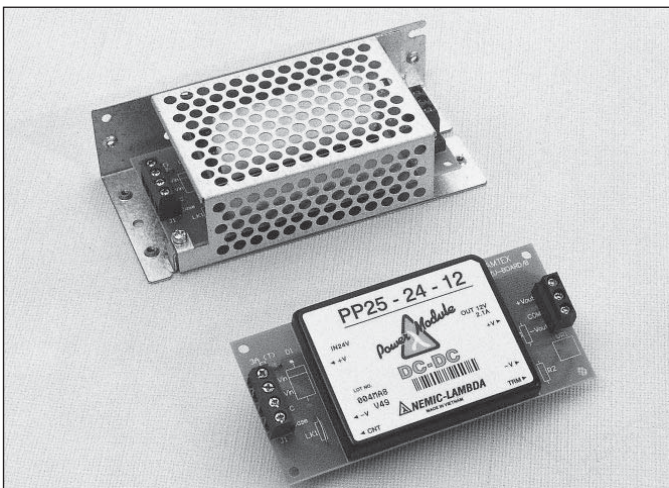
PP SERIES

DC/DC Single & Dual Output: 1.5 - 25 Watts



Features

- Choice of 94 models
- 5V, 12V, 24V and 48VDC input options
- Single and dual output models
- Fully isolated floating output
- PCB mounting low profile modules
- Chassis mount options
- Constant current limiting overload
- Voltage trim for 15 and 25 watt models
- Remote control for 15 and 25 watt models
- Proven field reliability and performance
- DIN rail mounting options, consult office
- Wide input voltage range
- High operating temperature +71°C
- Zero load operation



Specifications

INPUT VOLTAGE: (1.5~10.0W)	5VDC: (4.5~7.2) 24VDC: (18~32)	12VDC: (8~16.5) 48VDC: (32~63)																					
INPUT VOLTAGE: (15~25W)	5VDC: (4.7~7.2) 24VDC: (18~36)	12VDC: (9~18) 48VDC: (36~72)																					
INPUT CURRENT: (15~25W)	Model dependent, consult office for specifications																						
EFFICIENCY:	Model dependent, typically 70~84%																						
OUTPUT V/A:	Refer to table																						
OUTPUT V. ADJUSTMENT:	V out is fixed for 1.5 - 10W models. ±5% adjustment model 15 - 25W only via external resistor network																						
OUTPUT POWER:	Single output: 1.5 - 25 watts Dual output: 1.5 - 10 watts																						
LOAD REGULATION:	Typically ±0.6%																						
LINE REGULATION:	Typically ±0.4%																						
OUTPUT RIPPLE:	120mV for 5V output models 150mV for other output voltages																						
OVP:	15 - 25W models only, set at 115 - 140% of nominal V out																						
OVERLOAD PROTECTION:	Constant current limiting, 15 - 25W Foldback current limiting, 1.5 - 10W																						
TEMP. CO-EFFICIENT:	0.03% per °C																						
PARALLEL OPERATION:	No																						
SERIES OPERATION:	Yes																						
OPERATING TEMPERATURE:	-20°C to +71°C at rated input and load. Derate from +55°C @ 0.6W per°C																						
STORAGE TEMPERATURE:	-40°C to +85°C																						
ISOLATION VOLTAGE:	Input - output: 500VDC Output - case: 500VDC																						
SWITCH FREQUENCY:	330KHz 1.5W and 3W models 400KHz 6W and 25W models																						
REMOTE CONTROL:	15 and 25W models only																						
DIMENSIONS & WEIGHT:	<table border="0"> <thead> <tr> <th></th> <th>W x H x L</th> <th></th> </tr> </thead> <tbody> <tr> <td>PP1R5: 1.5W</td> <td>33 x 8 x 21mm</td> <td>15g</td> </tr> <tr> <td>PP3: 3W</td> <td>47 x 8 x 28mm</td> <td>25g</td> </tr> <tr> <td>PP6: 6W</td> <td>47 x 8 x 42mm</td> <td>40g</td> </tr> <tr> <td>PP10: 10W</td> <td>47 x 8 x 42mm</td> <td>40g</td> </tr> <tr> <td>PP15: 15W</td> <td>48 x 8 x 50mm</td> <td>65g</td> </tr> <tr> <td>PP25: 25W</td> <td>65 x 8 x 50mm</td> <td>65g</td> </tr> </tbody> </table>			W x H x L		PP1R5: 1.5W	33 x 8 x 21mm	15g	PP3: 3W	47 x 8 x 28mm	25g	PP6: 6W	47 x 8 x 42mm	40g	PP10: 10W	47 x 8 x 42mm	40g	PP15: 15W	48 x 8 x 50mm	65g	PP25: 25W	65 x 8 x 50mm	65g
	W x H x L																						
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PP15: 15W	48 x 8 x 50mm	65g																					
PP25: 25W	65 x 8 x 50mm	65g																					
CONNECTIONS:	PCB mounting																						

Chassis/Panel Mount Type Option:

All of the PCB mounting modules can be supplied in a package suitable for panel mounting. The connections are then offered on screw terminals. For this option change the first two letters to "TT", eg: TT6 - 48 - 12. Dimensions 125 x 57 x 32mm

PP SERIES

DC/DC Single Output: 1.5 - 25 Watts

MODEL	Input	Output		Power W
		V	A	
PP1R5 - 5 - 5	5V	5V	0.3A	1.5W
PP1R5 - 5 - 12	5V	12V	0.12A	1.5W
PP1R5 - 5 - 15	5V	15V	0.1A	1.5W
PP1R5 - 12 - 5	12V	5V	0.3A	1.5W
PP1R5 - 12 - 12	12V	12V	0.12A	1.5W
PP1R5 - 12 - 15	12V	15V	0.1A	1.5W
PP1R5 - 24 - 5	24V	5V	0.3A	1.5W
PP1R5 - 24 - 12	24V	12V	0.12A	1.5W
PP1R5 - 24 - 15	24V	15V	0.1A	1.5W
PP1R5 - 48 - 5	48V	5V	0.3A	1.5W
PP1R5 - 48 - 12	48V	12V	0.12A	1.5W
PP1R5 - 48 - 15	48V	15V	0.1A	1.5W
PP3 - 5 - 5	5V	5V	0.6A	3W
PP3 - 5 - 12	5V	12V	0.24A	3W
PP3 - 5 - 15	5V	15V	0.2A	3W
PP3 - 12 - 5	12V	5V	0.6A	3W
PP3 - 12 - 12	12V	12V	0.24A	3W
PP3 - 12 - 15	12V	15V	0.2A	3W
PP3 - 24 - 5	24V	5V	0.6A	3W
PP3 - 24 - 12	24V	12V	0.24A	3W
PP3 - 24 - 15	24V	15V	0.2A	3W
PP3 - 48 - 5	48V	5V	0.6A	3W
PP3 - 48 - 12	48V	12V	0.24A	3W
PP3 - 48 - 15	48V	15V	0.2A	3W
PP6 - 5 - 5	5V	5V	1.2A	6W
PP6 - 5 - 12	5V	12V	0.5A	6W
PP6 - 5 - 15	5V	15V	0.4A	6W
PP6 - 12 - 5	12V	5V	1.2A	6W
PP6 - 12 - 12	12V	12V	0.5A	6W
PP6 - 12 - 15	12V	15V	0.4A	6W
PP6 - 24 - 5	24V	5V	1.2A	6W
PP6 - 24 - 12	24V	12V	0.5A	6W
PP6 - 24 - 15	24V	15V	0.4A	6W
PP6 - 48 - 5	48V	5V	1.2A	6W
PP6 - 48 - 12	48V	12V	0.5A	6W
PP6 - 48 - 15	48V	15V	0.4A	6W
PP10 - 5 - 5	5V	5V	1.6A	8W
PP10 - 5 - 12	5V	12V	0.7A	8W
PP10 - 5 - 15	5V	15V	0.6A	9W
PP10 - 12 - 5	12V	5V	2.0A	10W
PP10 - 12 - 12	12V	12V	0.9A	10W
PP10 - 12 - 15	12V	15V	0.7A	10W
PP10 - 24 - 5	24V	5V	2.0A	10W
PP10 - 24 - 12	24V	12V	0.9A	10W
PP10 - 24 - 15	24V	15V	0.7A	10W
PP10 - 48 - 5	48V	5V	2.0A	10W
PP10 - 48 - 12	48V	12V	0.9A	10W
PP10 - 48 - 15	48V	15V	0.7A	10W
PP15 - 12 - 5	12V	5V	2.4A	12W
PP15 - 12 - 12	12V	12V	1.3A	15W
PP15 - 12 - 15	12V	15V	1.0A	15W
PP15 - 24 - 5	24V	5V	2.4A	15W
PP15 - 24 - 12	24V	12V	1.3A	15W
PP15 - 24 - 15	24V	15V	1.0A	15W
PP15 - 48 - 5	48V	5V	2.4A	15W
PP15 - 48 - 12	48V	12V	1.3A	15W
PP15 - 48 - 15	48V	15V	1.0A	15W
PP25 - 5 - 3.3	5V	3.3V	3.0A	9.9W
PP25 - 5 - 5.2	5V	5.2V	2.9A	15W
PP25 - 12 - 5	12V	5V	4.0A	25W
PP25 - 12 - 12	12V	12V	2.1A	25W
PP25 - 12 - 15	12V	15V	1.7A	25W
PP25 - 24 - 5	24V	5V	4.0A	25W
PP25 - 24 - 12	24V	12V	2.1A	25W
PP25 - 24 - 15	24V	15V	1.7A	25W
PP25 - 48 - 5	48V	5V	4.0A	25W
PP25 - 48 - 12	48V	12V	2.1A	25W
PP25 - 48 - 15	48V	15V	1.7A	25W

DC/DC Dual Output: 1.5 - 10 Watts

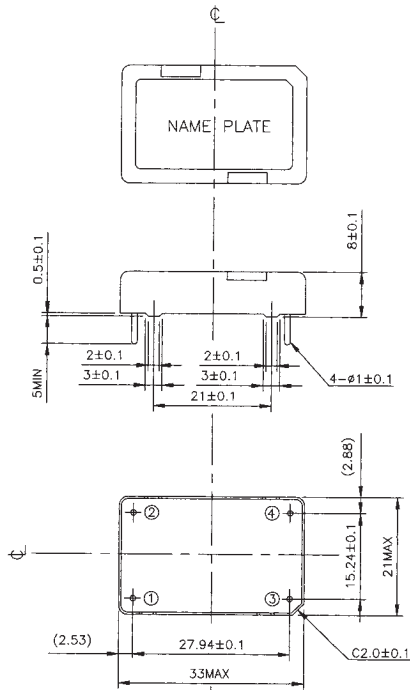
MODEL	Input	Output		Power W
		V	A	
PPD1R5 - 5 - 1212	5V	±12V	0.06A	1.5W
PPD1R5 - 5 - 1515	5V	±15V	0.05A	1.5W
PPD1R5 - 12 - 1212	12V	±12V	0.06A	1.5W
PPD1R5 - 12 - 1515	12V	±15V	0.05A	1.5W
PPD1R5 - 24 - 1212	24V	±12V	0.06A	1.5W
PPD1R5 - 24 - 1515	24V	±15V	0.05A	1.5W
PPD1R5 - 48 - 1212	48V	±12V	0.06A	1.5W
PPD1R5 - 48 - 1515	48V	±15V	0.05A	1.5W
PPD3 - 5 - 1212	5V	±12V	0.12A	3W
PPD3 - 5 - 1515	5V	±15V	0.1A	3W
PPD3 - 12 - 1212	12V	±12V	0.12A	3W
PPD3 - 12 - 1515	12V	±15V	0.1A	3W
PPD3 - 24 - 1212	24V	±12V	0.12A	3W
PPD3 - 24 - 1515	24V	±15V	0.1A	3W
PPD3 - 48 - 1212	48V	±12V	0.12A	3W
PPD3 - 48 - 1515	48V	±15V	0.1A	3W
PPD6 - 5 - 1212	5V	±12V	0.25A	6W
PPD6 - 5 - 1515	5V	±15V	0.2A	6W
PPD6 - 12 - 1212	12V	±12V	0.25A	6W
PPD6 - 12 - 1515	12V	±15V	0.2A	6W
PPD6 - 24 - 1212	24V	±12V	0.25A	6W
PPD6 - 24 - 1515	24V	±15V	0.2A	6W
PPD6 - 48 - 1212	48V	±12V	0.25A	6W
PPD6 - 48 - 1515	48V	±15V	0.2A	6W
PPD10 - 5 - 1212	5V	±12V	0.35A	8W
PPD10 - 5 - 1515	5V	±15V	0.30A	9W
PPD10 - 12 - 1212	12V	±12V	0.45A	10W
PPD10 - 12 - 1515	12V	±15V	0.35A	10W
PPD10 - 24 - 1212	24V	±12V	0.45A	10W
PPD10 - 24 - 1515	24V	±15V	0.35A	10W
PPD10 - 48 - 1212	48V	±12V	0.45A	10W
PPD10 - 48 - 1515	48V	±15V	0.35A	10W



PP SERIES

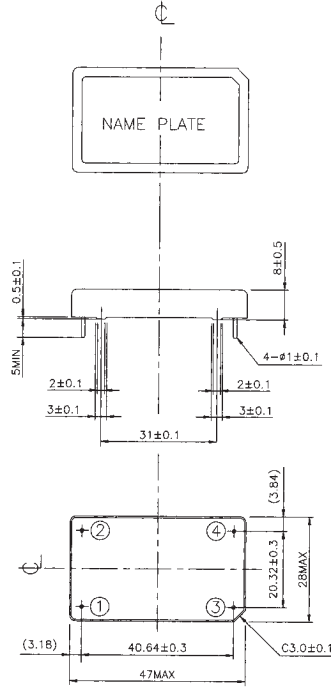
DC/DC Single & Dual Output: 1.5 - 25 Watts

PP1R5



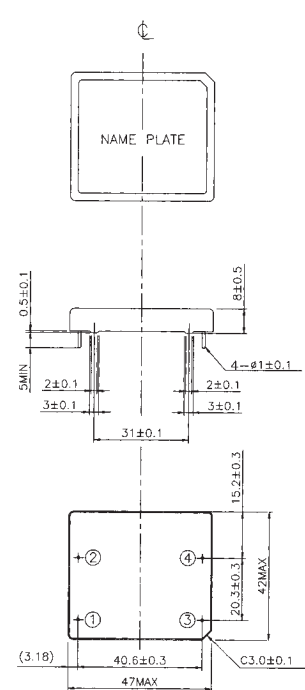
Terminal assignments
 ① +V INPUT
 ② -V INPUT
 ③ +V OUTPUT
 ④ -V OUTPUT
 Case: Copper (Thickness 0.4mm)
 Weight: 15g

PP3



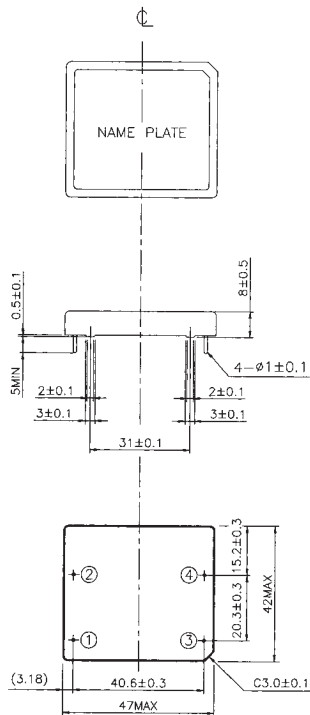
Terminal assignments
 ① +V INPUT
 ② -V INPUT
 ③ +V OUTPUT
 ④ -V OUTPUT
 Case: Copper (Thickness 0.4mm)
 Weight: 25g

PP6



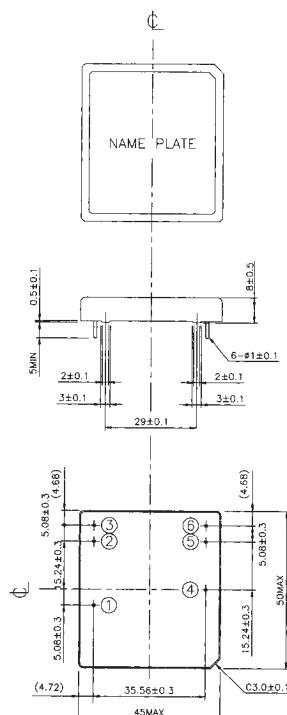
Terminal assignments
 ① +V INPUT
 ② -V INPUT
 ③ +V OUTPUT
 ④ -V OUTPUT
 Case: Copper (Thickness 0.4mm)
 Weight: 40g

PP10



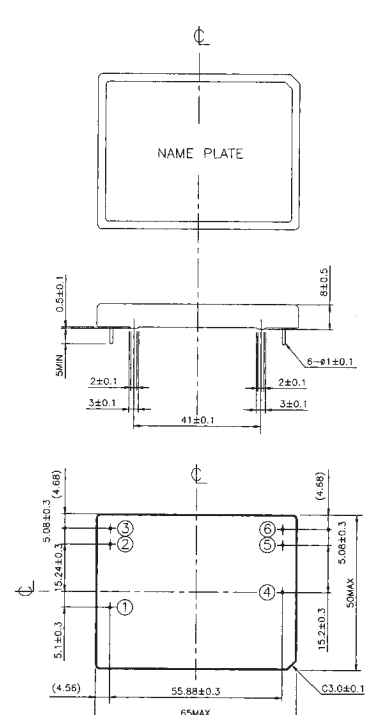
Terminal assignments
 ① +V INPUT
 ② -V INPUT
 ③ +V OUTPUT
 ④ -V OUTPUT
 Case: Copper (Thickness 0.4mm)
 Weight: 40g

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

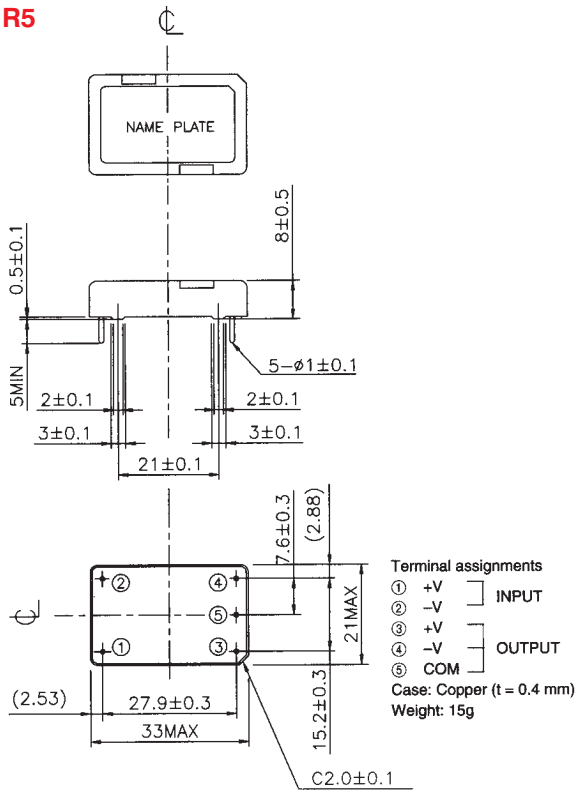


Terminal assignments
 ① +V INPUT
 ② -V INPUT
 ③ CNT
 ④ +V OUTPUT
 ⑤ -V OUTPUT
 ⑥ TRM
 Case: Copper (Thickness 0.4mm)
 Weight: 65g

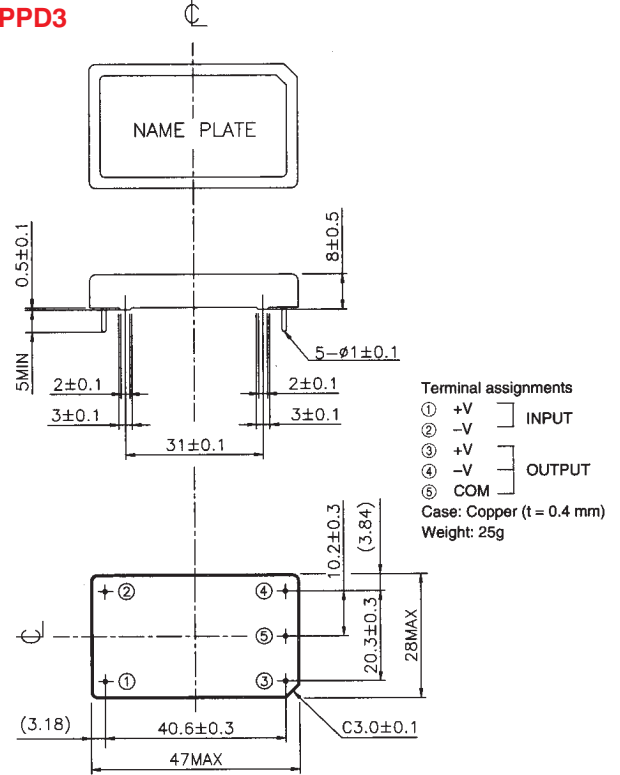
PP SERIES

DC/DC Single & Dual Output: 1.5 - 25 Watts

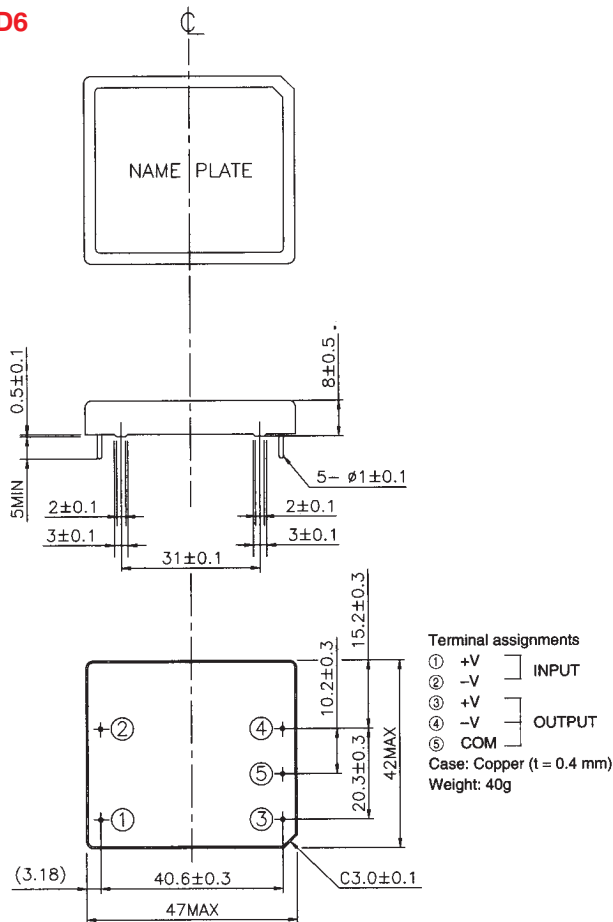
PPD1R5



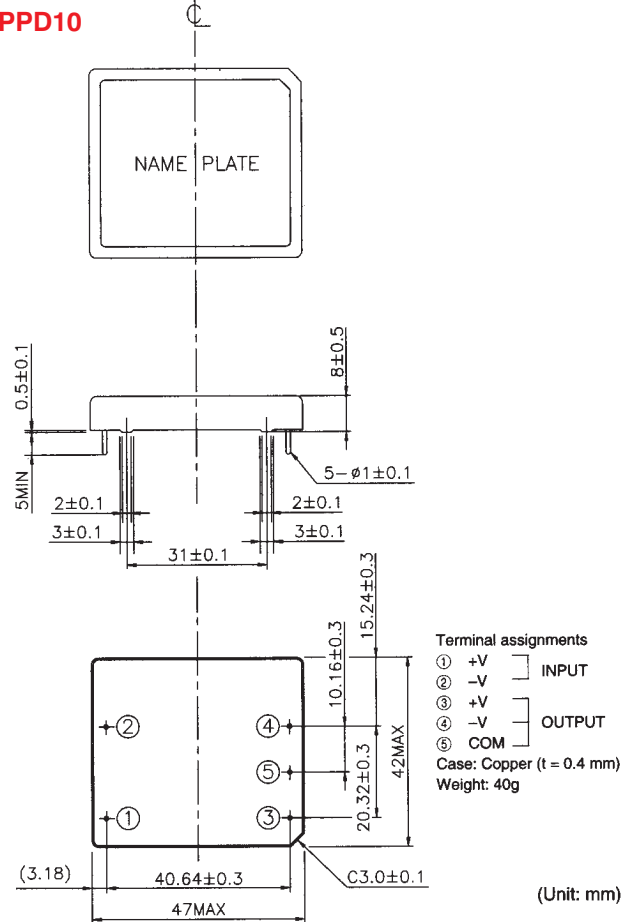
PPD3



PPD6



PPD10



(Unit: mm)