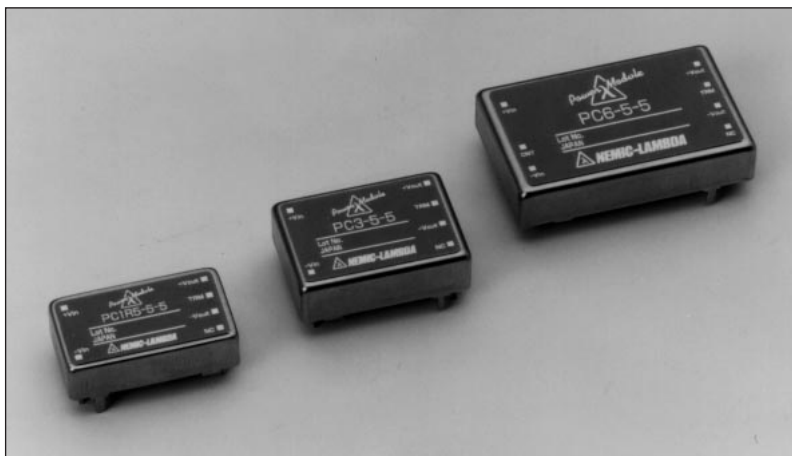




## ■ Model name

**P C 6 - 24 - 5**

Series name      Output power      Input voltage      Output voltage

## ■ Features

- Input/Output isolation
- 5 dimensions shield metal case
- Over current protection
- Adjustable output voltage
- Remote ON/OFF control (6W type)

## ■ PC1R5 (1.5W type) Specifications

| Model                 |     | PC1R5<br>-5-3.3   | PC1R5<br>-5-5 | PC1R5<br>-5-12       | PC1R5<br>-12-3.3 | PC1R5<br>-12-5 | PC1R5<br>-12-12      | PC1R5<br>-24-3.3 | PC1R5<br>-24-5 | PC1R5<br>-24-12      | PC1R5<br>-48-3.3 | PC1R5<br>-48-5 | PC1R5<br>-48-12      |
|-----------------------|-----|-------------------|---------------|----------------------|------------------|----------------|----------------------|------------------|----------------|----------------------|------------------|----------------|----------------------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V) |               |                      | 12VDC (9 ~ 18V)  |                |                      | 24VDC (18 ~ 36V) |                |                      | 48VDC (36 ~ 72V) |                |                      |
| Output Voltage (*1)   | Vdc | 3.3V±5%           | 5V±5%         | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%          | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%          | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%          | 12V±5%<br>(15V±5%)   |
| Output Current        | mA  | 0 ~ 400           | 0 ~ 300       | 0 ~ 125<br>(0 ~ 100) | 0 ~ 400          | 0 ~ 300        | 0 ~ 125<br>(0 ~ 100) | 0 ~ 400          | 0 ~ 300        | 0 ~ 125<br>(0 ~ 100) | 0 ~ 400          | 0 ~ 300        | 0 ~ 125<br>(0 ~ 100) |
| Output Power (max)    | W   | 1.32              | 1.5           | 1.5                  | 1.32             | 1.5            | 1.5                  | 1.32             | 1.5            | 1.5                  | 1.32             | 1.5            | 1.5                  |
| Efficiency (typ) (*2) | %   | 66                | 69            | 71 (70)              | 70               | 73             | 75 (73)              | 70               | 75             | 76 (75)              | 70               | 73             | 76 (75)              |

## ■ PC3 (3W type) Specifications

| Model                 |     | PC3<br>-5-3.3     | PC3<br>-5-5 | PC3<br>-5-12         | PC3<br>-12-3.3  | PC3<br>-12-5 | PC3<br>-12-12        | PC3<br>-24-3.3   | PC3<br>-24-5 | PC3<br>-24-12        | PC3<br>-48-3.3   | PC3<br>-48-5 | PC3<br>-48-12        |
|-----------------------|-----|-------------------|-------------|----------------------|-----------------|--------------|----------------------|------------------|--------------|----------------------|------------------|--------------|----------------------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V) |             |                      | 12VDC (9 ~ 18V) |              |                      | 24VDC (18 ~ 36V) |              |                      | 48VDC (36 ~ 72V) |              |                      |
| Output Voltage (*1)   | Vdc | 3.3V±5%           | 5V±5%       | 12V±5%<br>(15V±5%)   | 3.3V±5%         | 5V±5%        | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%        | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%        | 12V±5%<br>(15V±5%)   |
| Output Current        | mA  | 0 ~ 600           | 0 ~ 600     | 0 ~ 250<br>(0 ~ 200) | 0 ~ 600         | 0 ~ 600      | 0 ~ 250<br>(0 ~ 200) | 0 ~ 600          | 0 ~ 600      | 0 ~ 250<br>(0 ~ 200) | 0 ~ 600          | 0 ~ 600      | 0 ~ 250<br>(0 ~ 200) |
| Output Power (max)    | W   | 1.98              | 3.0         | 3.0                  | 1.98            | 3.0          | 3.0                  | 1.98             | 3.0          | 3.0                  | 1.98             | 3.0          | 3.0                  |
| Efficiency (typ) (*2) | %   | 65                | 70          | 72 (72)              | 70              | 75           | 77 (77)              | 70               | 75           | 78 (78)              | 70               | 75           | 79 (79)              |

## ■ PC6 (6W type) Specifications

| Model                 |     | PC6<br>-5-3.3           | PC6<br>-5-5 | PC6<br>-5-12         | PC6<br>-12-3.3  | PC6<br>-12-5 | PC6<br>-12-12        | PC6<br>-24-3.3   | PC6<br>-24-5 | PC6<br>-24-12        | PC6<br>-48-3.3   | PC6<br>-48-5 | PC6<br>-48-12        |
|-----------------------|-----|-------------------------|-------------|----------------------|-----------------|--------------|----------------------|------------------|--------------|----------------------|------------------|--------------|----------------------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V)       |             |                      | 12VDC (9 ~ 18V) |              |                      | 24VDC (18 ~ 36V) |              |                      | 48VDC (36 ~ 72V) |              |                      |
| Output Voltage (*1)   | Vdc | 3.3V±5%                 | 5V±5%       | 12V±5%<br>(15V±5%)   | 3.3V±5%         | 5V±5%        | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%        | 12V±5%<br>(15V±5%)   | 3.3V±5%          | 5V±5%        | 12V±5%<br>(15V±5%)   |
| Output Current        | mA  | 0 ~ 1200                | 0 ~ 1000    | 0 ~ 500<br>(0 ~ 400) | 0 ~ 1500        | 0 ~ 1200     | 0 ~ 500<br>(0 ~ 400) | 0 ~ 1500         | 0 ~ 1200     | 0 ~ 500<br>(0 ~ 400) | 0 ~ 1500         | 0 ~ 1200     | 0 ~ 500<br>(0 ~ 400) |
| Output Power (max)    | W   | 3.96                    | 6.0         | 6.0                  | 4.95            | 6.0          | 6.0                  | 4.95             | 6.0          | 6.0                  | 4.95             | 6.0          | 6.0                  |
| Efficiency (typ) (*2) | %   | 70                      | 74          | 78 (78)              | 73              | 77           | 84 (84)              | 77               | 82           | 84 (84)              | 77               | 82           | 85 (85)              |
| Remote ON/OFF control | —   | Possible (CNT terminal) |             |                      |                 |              |                      |                  |              |                      |                  |              |                      |

## ■ Common specifications

|                         |                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------|
| Withstand Voltage       | Input to Output: 500VAC for 1 minute                                                                           |
| Cooling                 | Convection cooling                                                                                             |
| Operating Temperature   | -20 ~ +70°C (-20 ~ +50°C: 100%, +60°C: 70%, +70°C: 40%)                                                        |
| Over Current Protection | Output current limiting, automatic recovery. Avoid to operate overload or dead short for more than 30 seconds. |
| Input Protection        | Built in Fuse on input line                                                                                    |

(\*1) Measured at the maximum output power with rated input voltage (5VDC, 12VDC, 24VDC, 48VDC)

(\*2) At rated input voltage &amp; maximum output power.

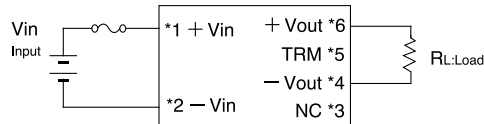
## Terminal connection

### [PC1R5 (1.5W type) / PC3 (3W type)]

Output voltage can be adjustable by TRM terminal.

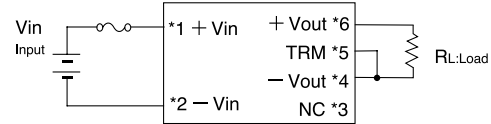
Output power must be within the rating, when increasing the output voltage.

#### \*1 TRM terminal: Open



| Type           | 3.3V type | 5V type | 12V type |
|----------------|-----------|---------|----------|
| Output voltage | 3.3V      | 5V      | 12V      |

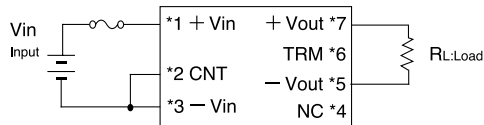
#### \*2 TRM terminal & -Vout terminal: Short



| Type           | 3.3V type | 5V type | 12V type |
|----------------|-----------|---------|----------|
| Output voltage | 3.67V     | 6V      | 15V      |

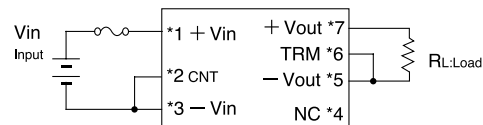
### [PC6 (6W type)]

#### \*1 TRM terminal: Open



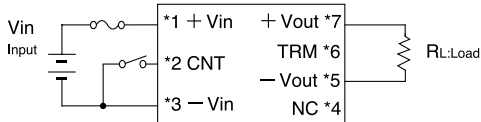
| Type           | 3.3V type | 5V type | 12V type |
|----------------|-----------|---------|----------|
| Output voltage | 3.3V      | 5V      | 12V      |

#### \*2 TRM terminal & -Vout terminal: Short



| Type           | 3.3V type | 5V type | 12V type |
|----------------|-----------|---------|----------|
| Output voltage | 3.67V     | 6V      | 15V      |

#### \*3 CNT terminal: Remote ON/OFF control

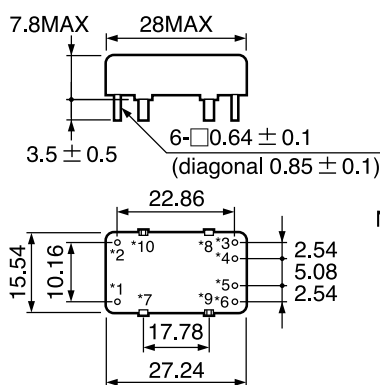


| CNT terminal                 | Output |
|------------------------------|--------|
| CNT --Vin: Short or 0 ~ 0.4V | ON     |
| CNT --Vin: Open or 2V ~ Vin  | OFF    |

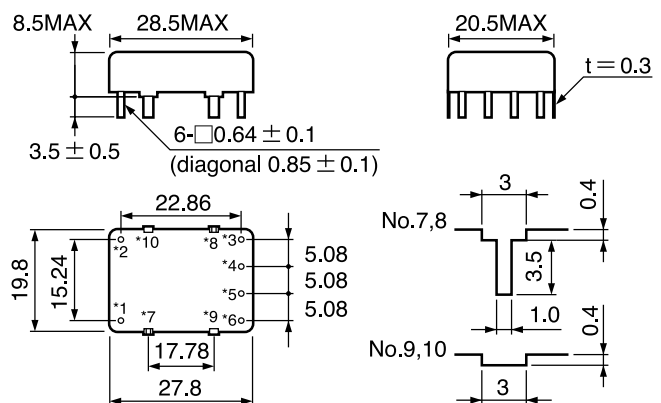
\* Output voltage: Refer to TRM terminal connection

## Outline drawing

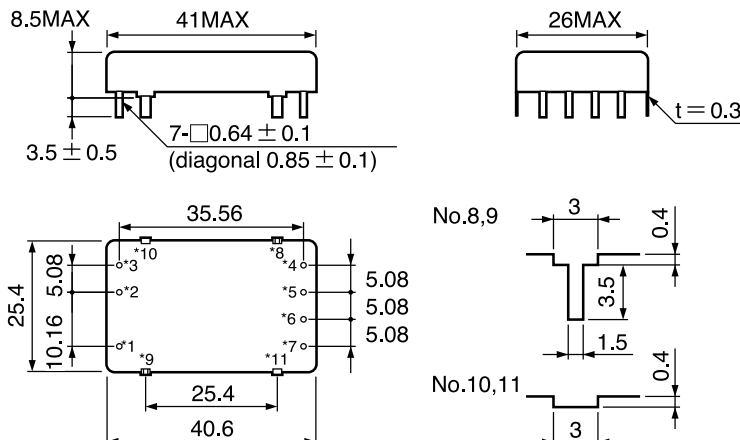
### • PC1R5 (1.5W type)



### • PC3 (3W type)

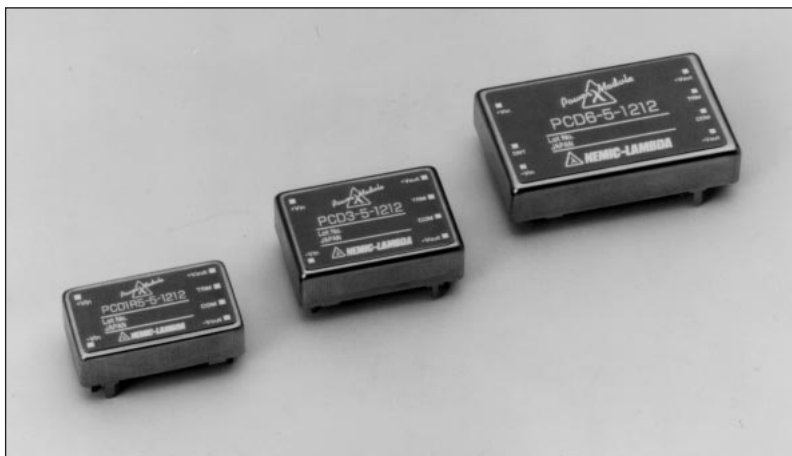


### • PC6 (6W type)



(Unit: mm)

Dimension tolerance not designated is  $\pm 0.3$ .



## ■ Model name

**PCD 6 - 24 - 1212**Series  
nameOutput  
powerInput  
voltageOutput  
voltage

## ■ Features

- Input/Output isolation
- 5 dimensions shield metal case
- Over current protection
- Adjustable output voltage
- Remote ON/OFF control (6W type)

## ■ PCD1R5 (1.5W type) Specifications

| Model                 |     | PCD1R5-5-1212     |         | PCD1R5-12-1212  |         | PCD1R5-24-1212   |         | PCD1R5-48-1212   |         |
|-----------------------|-----|-------------------|---------|-----------------|---------|------------------|---------|------------------|---------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V) |         | 12VDC (9 ~ 18V) |         | 24VDC (18 ~ 36V) |         | 48VDC (36 ~ 72V) |         |
| Output Voltage (*1)   | Vdc | ±12V±5%           | ±15V±5% | ±12V±5%         | ±15V±5% | ±12V±5%          | ±15V±5% | ±12V±5%          | ±15V±5% |
| Output Current        | mA  | 0 ~ ±60           | 0 ~ ±50 | 0 ~ ±60         | 0 ~ ±50 | 0 ~ ±60          | 0 ~ ±50 | 0 ~ ±60          | 0 ~ ±50 |
| Output Power (max)    | W   | 1.44              | 1.5     | 1.44            | 1.5     | 1.44             | 1.5     | 1.44             | 1.5     |
| Efficiency (typ) (*2) | %   | 69                | 67      | 73              | 73      | 75               | 75      | 75               | 75      |

## ■ PCD3 (3W type) Specifications

| Model                 |     | PCD3-5-1212       |          | PCD3-12-1212    |          | PCD3-24-1212     |          | PCD3-48-1212     |          |
|-----------------------|-----|-------------------|----------|-----------------|----------|------------------|----------|------------------|----------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V) |          | 12VDC (9 ~ 18V) |          | 24VDC (18 ~ 36V) |          | 48VDC (36 ~ 72V) |          |
| Output Voltage (*1)   | Vdc | ±12V±5%           | ±15V±5%  | ±12V±5%         | ±15V±5%  | ±12V±5%          | ±15V±5%  | ±12V±5%          | ±15V±5%  |
| Output Current        | mA  | 0 ~ ±125          | 0 ~ ±100 | 0 ~ ±125        | 0 ~ ±100 | 0 ~ ±125         | 0 ~ ±100 | 0 ~ ±125         | 0 ~ ±100 |
| Output Power (max)    | W   | 3.0               | 3.0      | 3.0             | 3.0      | 3.0              | 3.0      | 3.0              | 3.0      |
| Efficiency (typ) (*2) | %   | 72                | 72       | 77              | 77       | 78               | 78       | 78               | 77       |

## ■ PCD6 (6W type) Specifications

| Model                 |     | PCD6-5-1212       |          | PCD6-12-1212    |          | PCD6-24-1212     |          | PCD6-48-1212     |          |
|-----------------------|-----|-------------------|----------|-----------------|----------|------------------|----------|------------------|----------|
| Input Voltage         | Vdc | 5VDC (4.5 ~ 9.0V) |          | 12VDC (9 ~ 18V) |          | 24VDC (18 ~ 36V) |          | 48VDC (36 ~ 72V) |          |
| Output Voltage (*1)   | Vdc | ±12V±5%           | ±15V±5%  | ±12V±5%         | ±15V±5%  | ±12V±5%          | ±15V±5%  | ±12V±5%          | ±15V±5%  |
| Output Current        | mA  | 0 ~ ±250          | 0 ~ ±200 | 0 ~ ±250        | 0 ~ ±200 | 0 ~ ±250         | 0 ~ ±200 | 0 ~ ±250         | 0 ~ ±200 |
| Output Power (max)    | W   | 6.0               | 6.0      | 6.0             | 6.0      | 6.0              | 6.0      | 6.0              | 6.0      |
| Efficiency (typ) (*2) | %   | 75                | 75       | 82              | 82       | 84               | 84       | 82               | 82       |

## ■ Common specifications

| Withstand Voltage       | Input to Output: 500VAC for 1 minute                                                                           |
|-------------------------|----------------------------------------------------------------------------------------------------------------|
| Cooling                 | Convection cooling                                                                                             |
| Operating Temperature   | -20 ~ +70°C (-20 ~ +50°C: 100%, +60°C: 70%: 40%)                                                               |
| Over Current Protection | Output current limiting, automatic recovery. Avoid to operate overload or dead short for more than 30 seconds. |
| Input Protection        | Built in fuse on input line                                                                                    |

(\*1) Output voltage accuracy includes line and load regulation and temperature drift.

(\*2) At rated input voltage &amp; maximum output power.

## Terminal connection

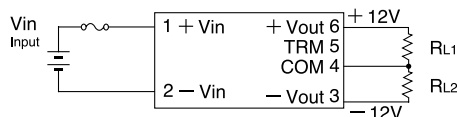
### [PCD1R5 (1.5W type) / PCD3 (3W type)]

Output voltage can be adjusted by TRM terminals.

Output power must be within the rating, when increasing the output voltage.

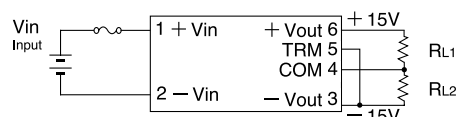
#### \*1 TRM terminal: Open

Output:  $\pm 12V$



#### \*2 TRM terminal & -Vout terminal: Short

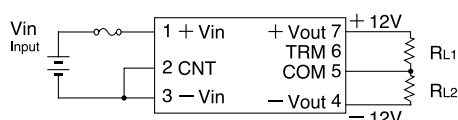
Output:  $\pm 15V$



### [PCD6 (6W type)]

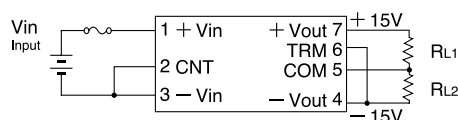
#### \*1 TRM terminal: Open

Output:  $\pm 12V$

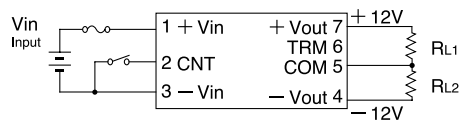


#### \*2 TRM terminal & -Vout terminal: Short

Output:  $\pm 15V$



CNT terminal: Remote ON/OFF control

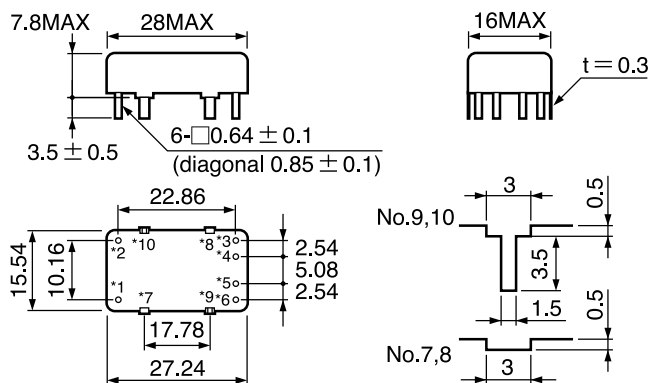


| CNT terminal                | Output |
|-----------------------------|--------|
| CNT--Vin: Short or 0 ~ 0.4V | ON     |
| CNT--Vin: Open or 2V ~ Vin  | OFF    |

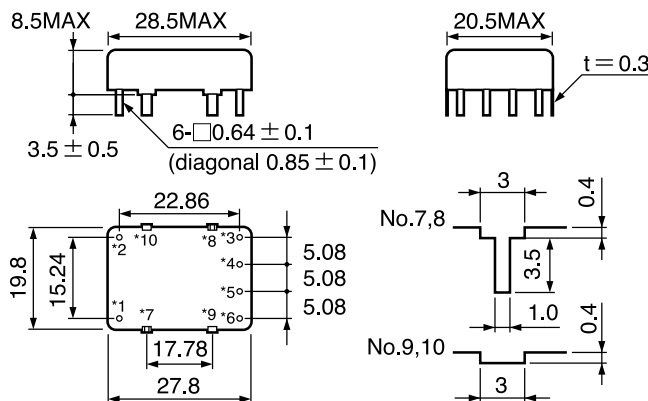
\* Output voltage: Refer to TRM terminal connection

## Outline drawing

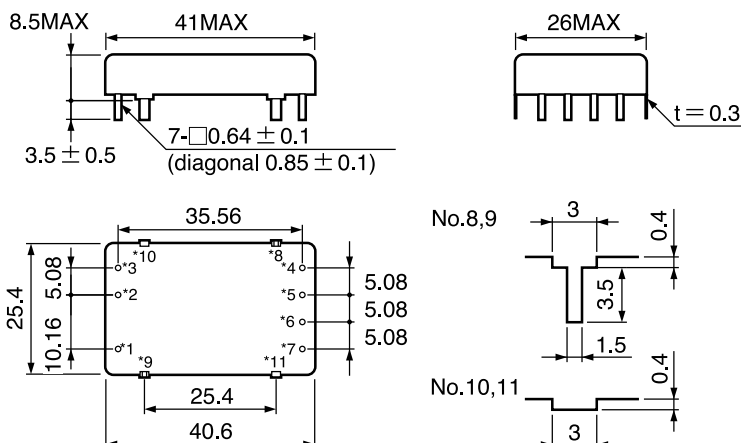
### • PCD1R5 (1.5W type)



### • PCD3 (3W type)



### • PCD6 (6W type)



(Unit: mm)

Dimension tolerance not designated is  $\pm 0.3$ .