# Block Type EMI Filters
## For DC Power Line DNM Series

The DNM series block type EMI filters are highly efficient EMI filters that combined feed through capacitors, multilayer ceramic capacitors with large capacitance and ferrite bead inductors. The filters suppress EMI efficiently in a wide frequency band, in common DC power supply lines that require a large current.

## ■Feature

- Since current channels have no internal connection, the EMI filters achieve large allowable current, and can be used for DC lines up to 15A.
- It offers high insertion loss in a wide frequency band, combining feed through capacitors with high self-resonating frequency, multilayer ceramic capacitors with large capacitance and ferrite bead inductors.
- It offers efficient EMI control by 1 block for both plus and minus lines.
- RoHS Compliant.

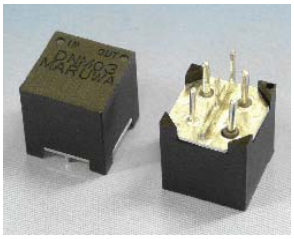
## ■Applications

- DC power lines of industrial equipment, computers and peripheral equipment.

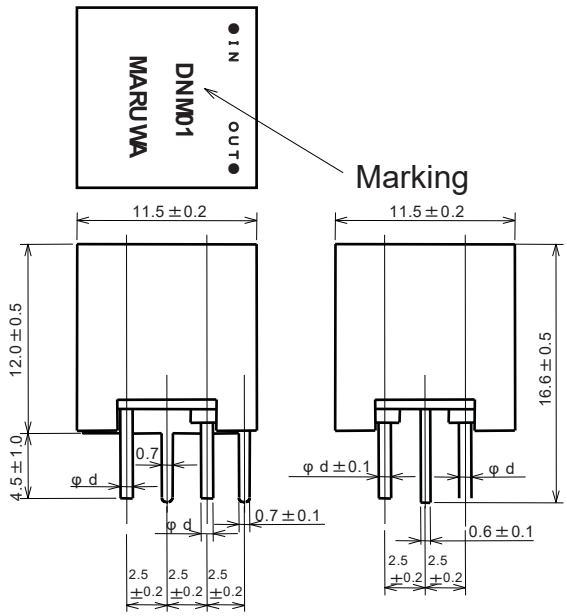
## ■Part Number List and Specifications

| Part number | Rated voltage | Withstanding voltage | Rated current | DC resistance | Temp. range | Storage Temperature range | Marking | Terminal dia.φd(mm) |
|---|---|---|---|---|---|---|---|---|
| DNM01-S | 50Vdc | 125Vdc | 10A | Under 5mΩ | -25～+105℃ | -40～+125℃ | DNM01 MARUWA | 0.8 |
| DNM02-S | 250Vdc | 500Vdc | 10A | | | | DNM02 MARUWA | |
| DNM03-S | 50Vdc | 125Vdc | 15A | | | | DNM03 MARUWA | 1.0 |

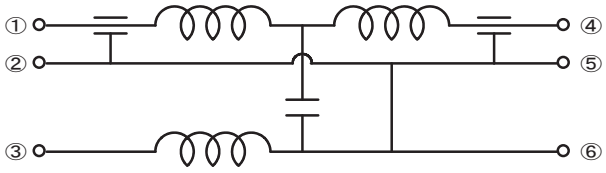
## ■Appearance



## ■Dimensions

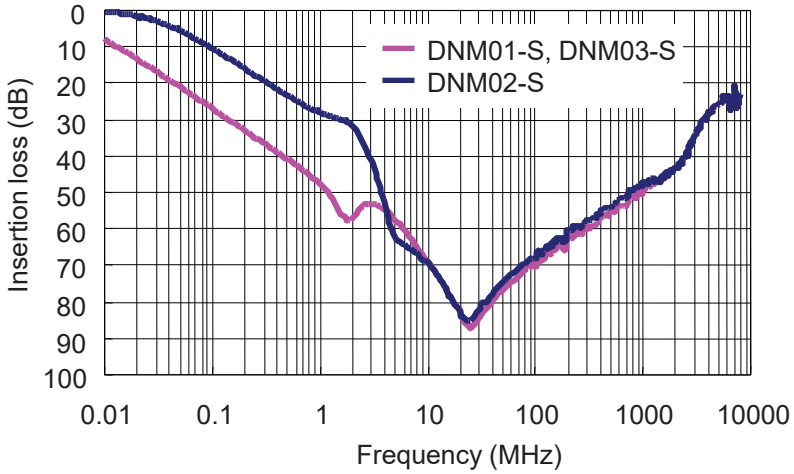



## ■Equivalent circuit




①power (input)(+)
②ground of circuit side
③ground of power side(-)
④output
⑤ground of circuit side
⑥ground of circuit side

## ■Insertion loss（Reference）

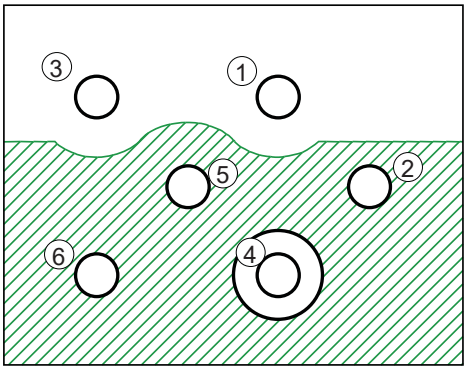


## ■Soldering

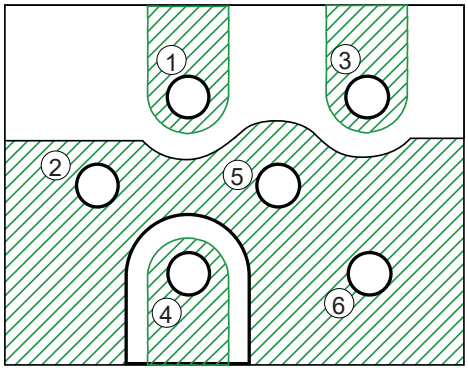
### 1.Basic design

Recommended P.C.Board pattern
Please use both side of P.C.B.

(1) Top side




(2) Bottom side



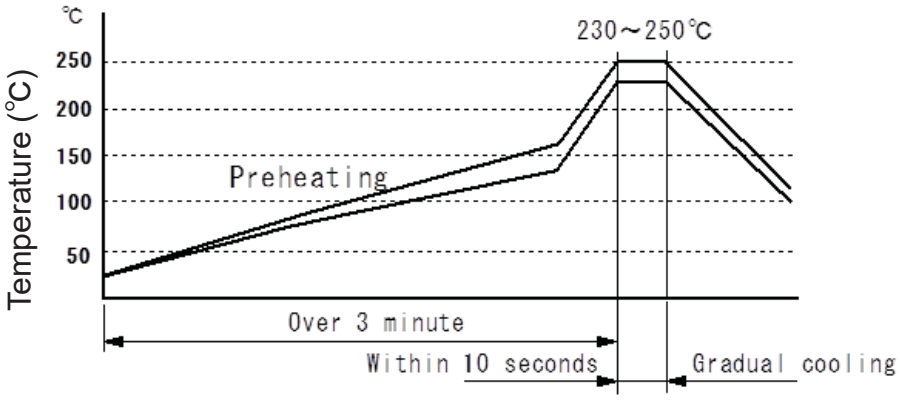

### Method of installation

Method of installation on P.C.board
(1) Design board to use all terminals and to take a ground greatly.
when a ground is too little, it may not be able to get the character of the specification fully.
(2) Insert EMI filter into the board to the foundation of the terminal and solder it.
(3) Wire the board so that power supply ground (terminal No.③) and circuit ground (terminal No.②,⑤ and ⑥) may not be connected even with other parts.

### 2.General cautions for soldering

For soldering, please refer to the soldering curves below.

Flow soldering recommended conditions




## ■Packaging quantity

| | |
|---|---|
| Minimum unit | 100pcs |
| Maximum qty. per box | 1200pcs |