

Block Type EMI Filters

For DC Power Line DCM Series

The surface mounting block type EMI filter, DCM series, which is based on the DNM series, has been developed to decrease the size for surface mounting purposes, which can substantially reduce the surface mounting area. It can efficiently control EMI within a wide band in common DC power lines that need large current.

Feature

- Large allowable current permits the use for DC lines up to 10A.
- The combination of a lead-through capacitor with high self-resonance frequency, a large capacitance multilayer capacitor, and multilayer suppressors ensures a large insertion loss within a wide band.
- Both plus and minus lines can be protected from EMI by a single compact block.
- The gold-plated termination ensures excellent solder heat resistance and solderability.
- RoHS Compliant.

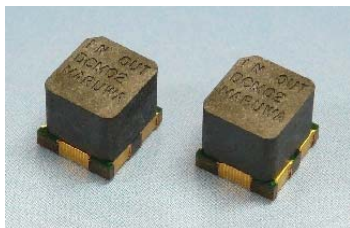
Applications

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

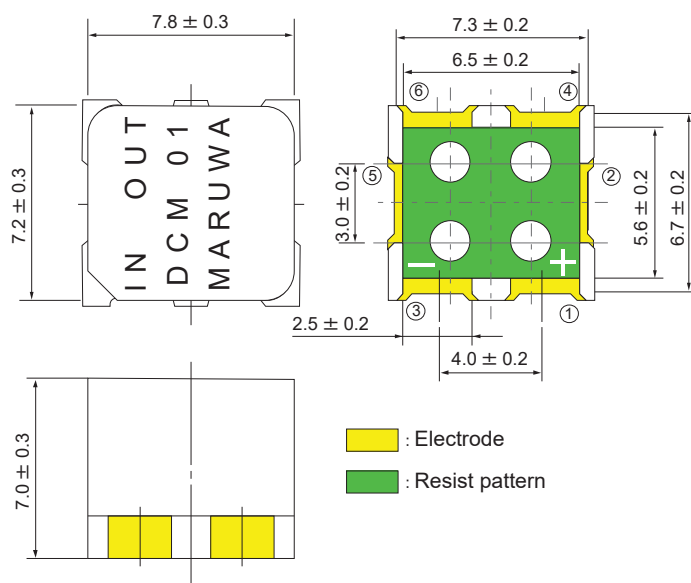
Part Number List and Specifications

Part number	Rated voltage	Withstanding voltage	Rated current	DC resistance	Temp. range	Storage Temperature range	Marking	Specification
DCM01-T	50Vdc	100Vdc	10A	Under 5mΩ	-25~+105°C	-55~+125°C	DCM01 MARUWA	Product for general circuits
DCM02-T	50Vdc	100Vdc	10A		-55~+125°C		DCM02 MARUWA	Product for high-reliability automobile use

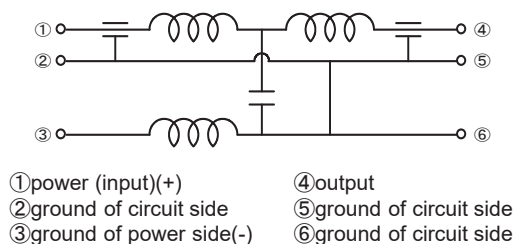
Appearance



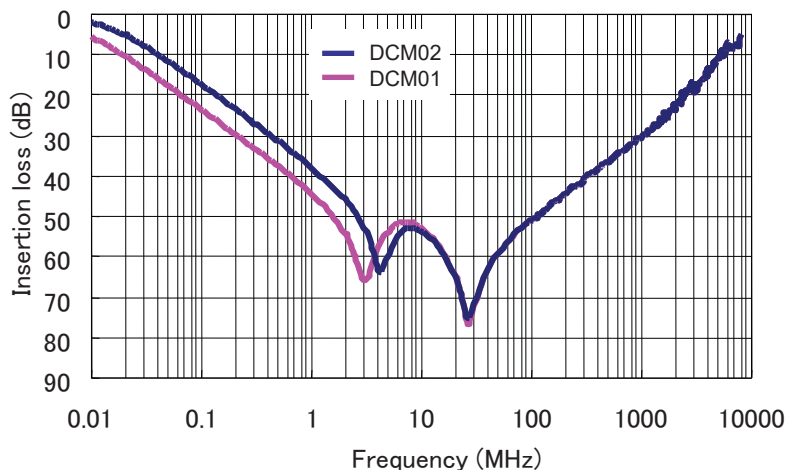
Dimensions



Equivalent circuit



Insertion loss (Reference)



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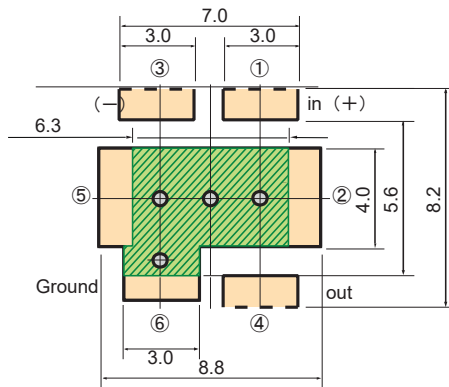
Precautions of use for DCM Series

■ Soldering (for only reflow soldering)

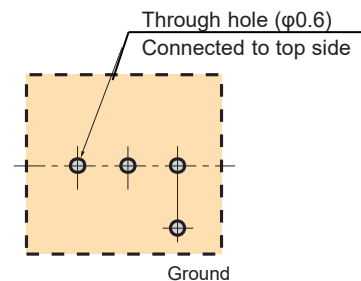
1. Basic design

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

(1) Top side



(2) Bottom side



①~⑥: terminal number
unit: mm, dimensions tolerance: ± 0.1 mm
Copper foil thickness: 35 μ m

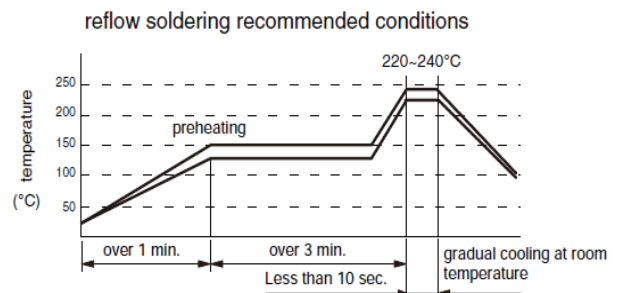
The notice in case of installation

When mounting into the printed circuit board, pay attention to the following point.

- (1) Always use all terminals and take ground as much as possible.
(Depending on the way of taking ground, the characteristic of the specification sometimes can not be sufficiently boiled.)
- (2) Wire so as not for the power ground (terminal ③) and the circuit ground (terminal ②, ⑤, ⑥) to connected.

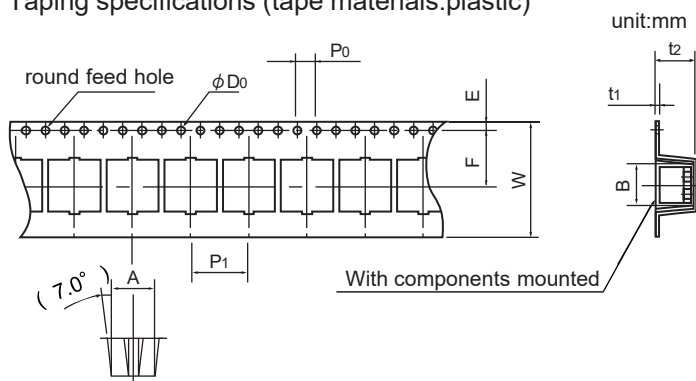
2. General cautions for soldering (for only reflow soldering)

For soldering, please refer to the soldering curves right.
This part is lead-free soldering.



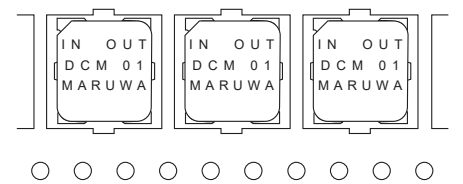
3. Taping

Taping specifications (tape materials: plastic)



Product insertion direction

← tape drawer direction



type	A	B	W	F	E	P1	P0	D0	t1	t2
DCM	8.7 \pm 0.1	8.7 \pm 0.1	24.0 \pm 0.3	11.5 \pm 0.1	1.75 \pm 0.1	12.0 \pm 0.1	4.0 \pm 0.1	ϕ 1.5 $^{+0.1}_{-0}$	0.6max.	8.0max.

■ Package qty.

type	Package qty.
Taping qty.	500 pcs / reel
Tray qty.	500 pcs