

**CHIP EMIFIL®**

EMIFIL® is the trademark of Murata Manufacturing Co., Ltd.

**muRata**

T-type Chip EMIFIL® NFM60R/NFM61R/NFM61RH Series

## Meets High Current of 6A T-Type Circuit Chip EMIFIL® with Ferrite Beads

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### FEATURES

1. Its large rated current and low voltage drop due to small DC resistance are suitable for DC power line use.
2. The feedthrough capacitor realized excellent high-frequency characteristics.
3. The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits.
4. For rugged operating environments such as automobile circuitry, Murata offers the heavy duty NFM61RH series. These filters have an extended operating temperature range of  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
5. The series has excellent solder heat resistance. Both flow and reflow soldering method can be employed. (Reflow soldering should be employed with the NFM60R 1500pF, NFM61RH 3300pF filter.)

### APPLICATIONS

- Office equipment such as personal computers, word processors and facsimiles
- Audio visual equipment such as TVs and VCRs

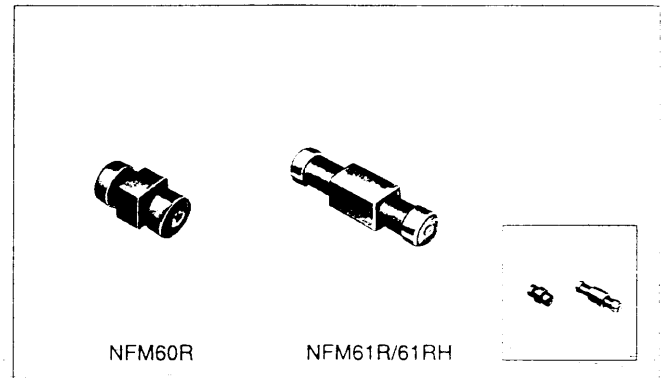
### PART NUMBERING

(Please specify the part number when ordering.)

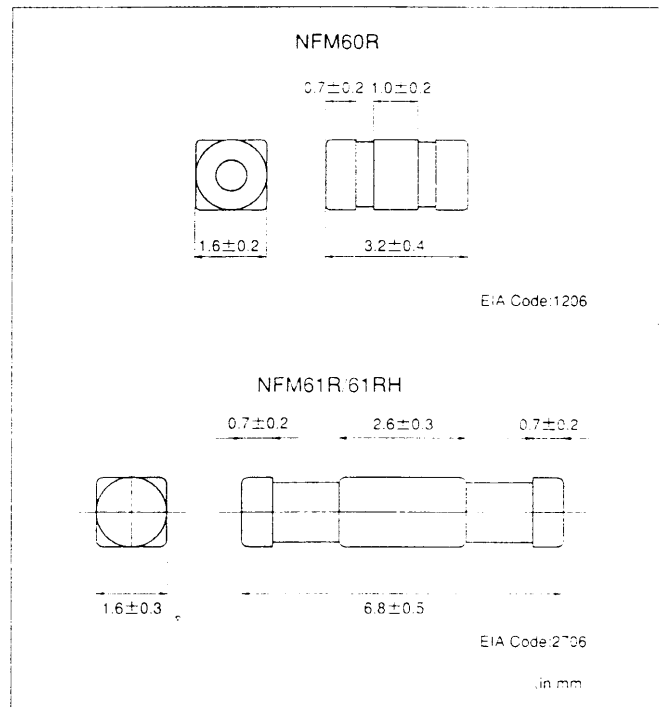
(Ex.) 

NFM60R	00	T	101	T1
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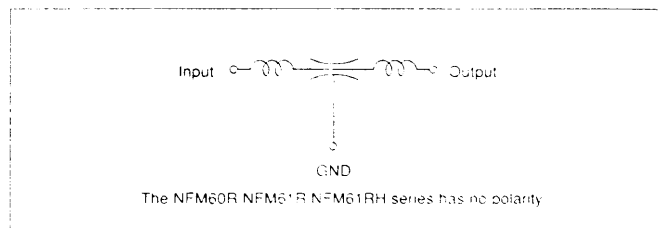
- ① Type
- ② Class No.
- ③ Circuit Composition
- ④ Characteristics
- ⑤ Packaging Code    T1 : Taped  
                              B1 : Bulk package



### DIMENSIONS



### EQUIVALENT CIRCUIT DIAGRAM



## SPECIFICATIONS

### NFM60R Series (Compact Size Type)

Part Number	Capacitance	Rated Voltage	Rated Current	Insulation Resistance	Operating Temp. Range
NFM60R00T220	22pF ± 30%	25VDC	6ADC	1000MΩ min.	-40°C to +85°C
NFM60R00T470	47pF ± 50/20%				
NFM60R00T101	100pF ± 80/20%				
NFM60R00T221	220pF ± 50/20%				
NFM60R10T471	470pF ± 50/20%				
NFM60R20T152 *1	1500pF ± 50/20%				
NFM60R30T222	2200pF ± 50%				

\*1 NFM60R20T152 is specially adapted for flow soldering. The flow soldering method should not be used.

### NFM61R Series

Part Number	Capacitance	Rated Voltage	Rated Current	Insulation Resistance	Operating Temp. Range
NFM61R00T330 *2	33pF ± 30%	50VDC	2ADC	1000MΩ min.	-25°C to +85°C
NFM61R00T680 *2	68pF ± 30%				
NFM61R00T101	100pF ± 30%				
NFM61R00T181	180pF ± 30%				
NFM61R00T361	360pF ± 20%				
NFM61R00T681 *2	680pF ± 30%				
NFM61R10T102	1000pF ± 80/20%				
NFM61R30T472	4700pF ± 80/20%				

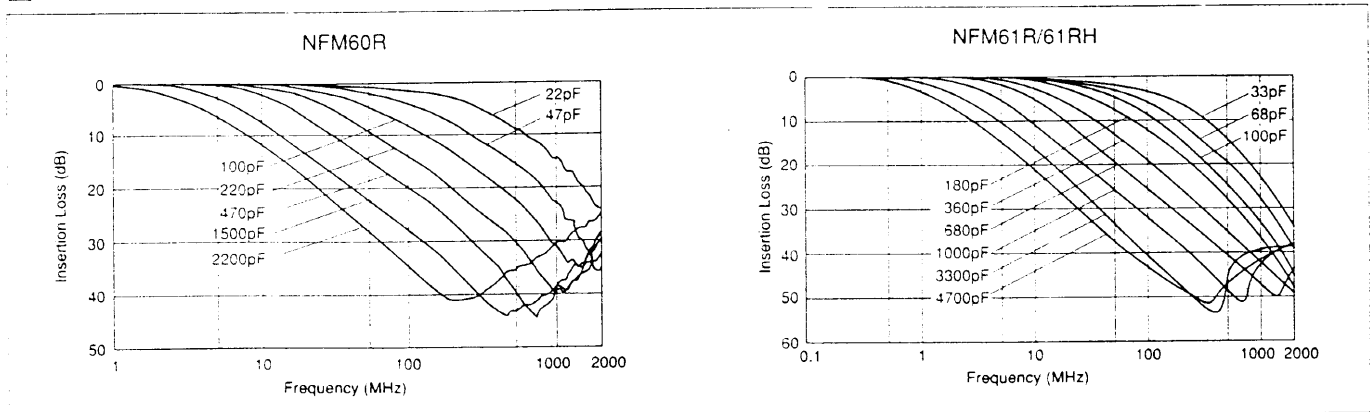
### NFM61RH Series (Heavy Duty Type)

Part Number	Capacitance	Rated Voltage	Rated Current	Insulation Resistance	Operating Temp. Range
NFM61RH00T330 *2	33pF ± 30%	100VDC	2ADC	1000MΩ min.	-55°C to +125°C
NFM61RH00T680 *2	68pF ± 30%				
NFM61RH00T101	100pF ± 30%				
NFM61RH00T181	180pF ± 30%				
NFM61RH00T361	360pF ± 20%				
NFM61RH00T681 *2	680pF ± 30%				
NFM61RH10T102	1000pF ± 80/20%				
NFM61RH20T332 *2	3300pF ± 80/20%				

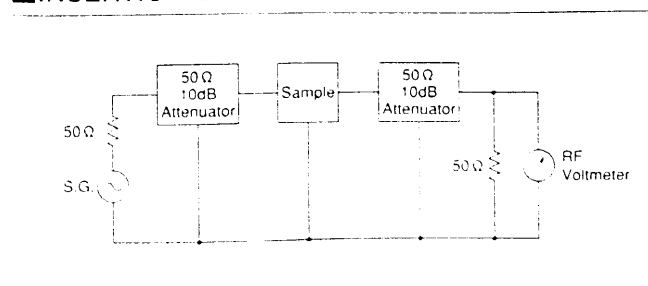
\*2 Marked items are not standard.

NFM61RH20T332 is specially adapted for reflow soldering. The flow soldering method should not be used.

## INSERTION LOSS CHARACTERISTICS (TYPICAL)



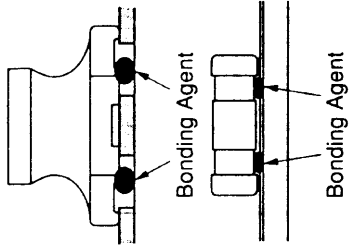
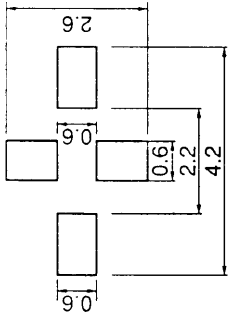
## INSERTION LOSS MEASURING CIRCUIT



NFM60R



- and 150  $\mu$  m (NFM60R).
- Use H60A solder for pattern printing.

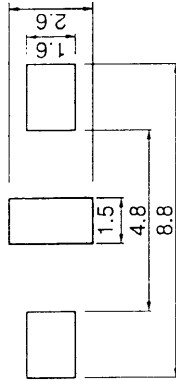


Coating Position of Bonding Agent

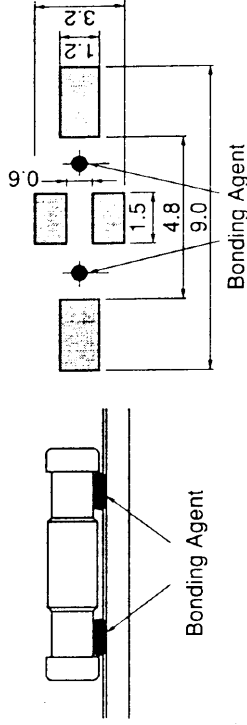
NFM61R/61RH



- Coat the solder paste a thickness of 200  $\mu$  m.
- Use H60A solder for pattern printing.



- Apply 1.0mg of bonding agent at each chip.



PLM250



- Coat the solder paste a thickness of 200  $\mu$  m.
- Use H60A solder for pattern printing.

