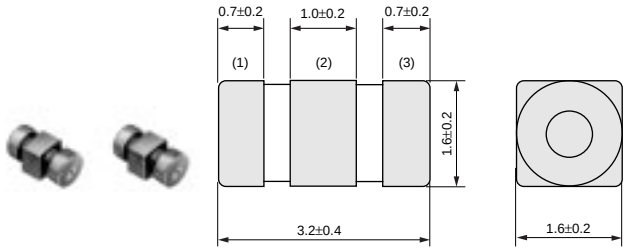
On-Board Type (DC) EMI Suppression Filters (EMIFIL®)

Chip EMIFIL® LC Combined Type for Large Current NFE31P/NFE61P/NFE61H Series

NFE31P Series

The chip "EMIFIL" NFE31P is small a size T-type circuit EMI suppression filter.



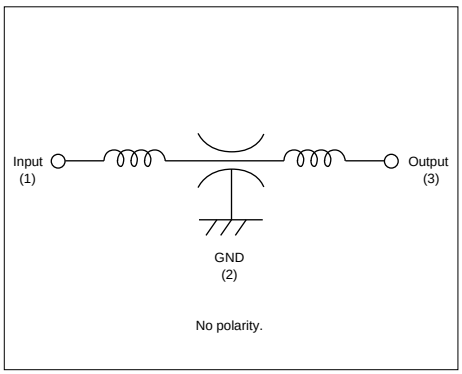
(in mm)

■ Features

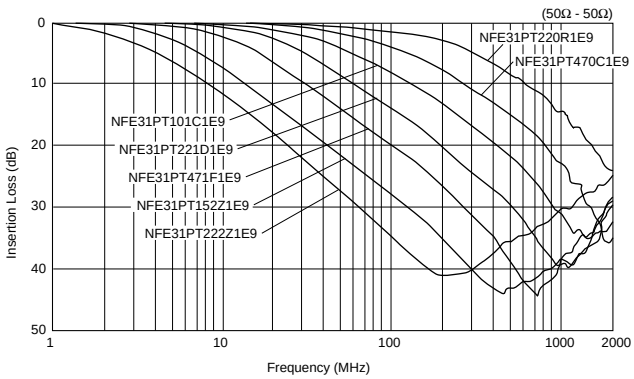
1. Its large rated current of 6A and low voltage drop due to small DC resistance are suitable for DC power line use.
2. The feedthrough capacitor realizes excellent high frequency characteristics.
3. The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits.
4. 22 to 22,000pF lineups can be used signal lines.

Part Number	Capacitance (pF)	Rated Voltage (Vdc)	Rated Current (A)	Insulation Resistance (min.) (M ohm)	Operating Temperature Range (°C)
NFE31PT220R1E9	22 +30%,-30%	25	6	1000	-40 to +85
NFE31PT470C1E9	47 +50%,-20%	25	6	1000	-40 to +85
NFE31PT101C1E9	100 +80%,-20%	25	6	1000	-40 to +85
NFE31PT221D1E9	220 +50%,-20%	25	6	1000	-40 to +85
NFE31PT471F1E9	470 +50%,-20%	25	6	1000	-40 to +85
NFE31PT152Z1E9	1500 +50%,-20%	25	6	1000	-40 to +85
NFE31PT222Z1E9	2200 +50%,-50%	25	6	1000	-40 to +85

■ Equivalent Circuit

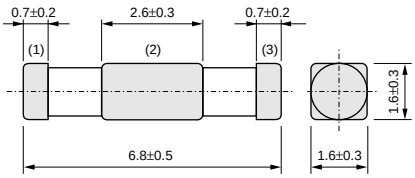


■ Insertion Loss Characteristics (Typical)



NFE61P Series

The chip "EMIFIL" NFE61P is a T-type circuit EMI suppression filter.



(in mm)

■ Feature

1. Its large rated current of 2A and low voltage drop due to small DC resistance are suitable for DC power line use.
2. The feedthrough capacitor realizes excellent high frequency characteristics.
3. The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits.
4. 33 to 4700pF lineups can be used signal lines.

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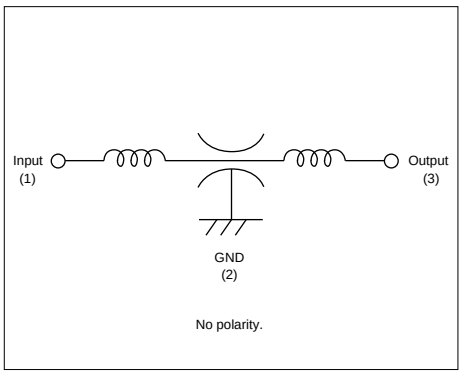
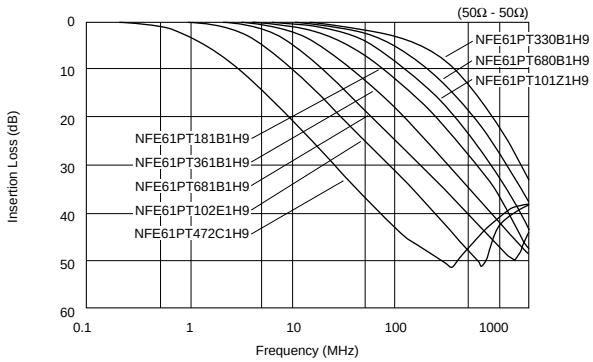
Part Number	Capacitance (pF)	Rated Voltage (Vdc)	Rated Current (A)	Insulation Resistance (min.) (M ohm)	Operating Temperature Range (°C)
NFE61PT330B1H9	33 +30%,-30%	50	2	1000	-25 to +85
NFE61PT680B1H9	68 +30%,-30%	50	2	1000	-25 to +85
NFE61PT101Z1H9	100 +30%,-30%	50	2	1000	-25 to +85
NFE61PT181B1H9	180 +30%,-30%	50	2	1000	-25 to +85
NFE61PT361B1H9	360 +20%,-20%	50	2	1000	-25 to +85
NFE61PT681B1H9	680 +30%,-30%	50	2	1000	-25 to +85
NFE61PT102E1H9	1000 +80%,-20%	50	2	1000	-25 to +85
NFE61PT472C1H9	4700 +80%,-20%	50	2	1000	-25 to +85

■ Equivalent Circuit

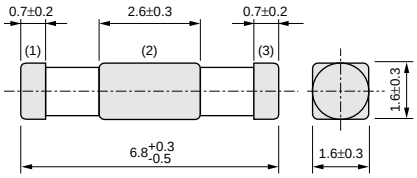


■ Insertion Loss Characteristics (Typical)



NFE61H Series

The T-type chip EMI Filter NFE61H series consists of a feedthrough capacitor and ferrite beads.
Extending the operating conditions of NFE61P, NFE61H series can be used in an application set under severe operating conditions.



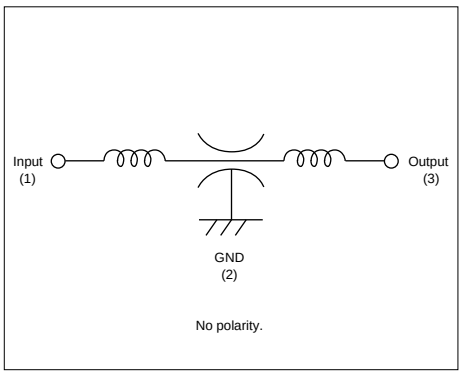
(in mm)

■ Features

1. These filters have an extended operating temperature range of -55C. to +125C.
2. Its large rated current of 2A and low voltage drop due to small DC resistance are suitable for DC power line use.
3. The feedthrough capacitor realizes excellent high frequency characteristics.
4. The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits.
5. 33 to 3300pF lineups can be used signal lines.

Part Number	Capacitance (pF)	Rated Voltage (Vdc)	Rated Current (A)	Insulation Resistance (min.) (M ohm)	Operating Temperature Range (°C)
NFE61HT330U2A9	33 +30%,-30%	100	2	1000	-55 to +125
NFE61HT680R2A9	68 +30%,-30%	100	2	1000	-55 to +125
NFE61HT101Z2A9	100 +30%,-30%	100	2	1000	-55 to +125
NFE61HT181C2A9	180 +30%,-30%	100	2	1000	-55 to +125
NFE61HT361C2A9	360 +20%,-20%	100	2	1000	-55 to +125
NFE61HT681D2A9	680 +30%,-30%	100	2	1000	-55 to +125
NFE61HT102F2A9	1000 +80%,-20%	100	2	1000	-55 to +125
NFE61HT332Z2A9	3300 +80%,-20%	100	2	1000	-55 to +125

■ Equivalent Circuit



■ Insertion Loss Characteristics (Typical)