

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



Chip EMIFIL® LC Combined Array Type NFA18S/21S Series

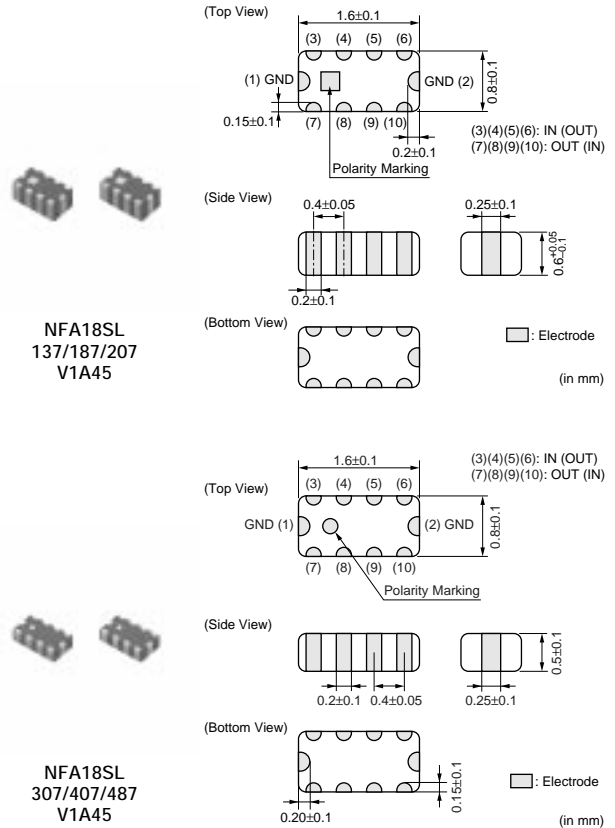
NFA18S Series

■ Features

1. NFA18SL series is LC combined noise suppression filter whose noise suppression curve is very steep and deep in spite of its small shape.
2. [cutoff frequency 300MHz, 400MHz, 480MHz type]
These products have good noise suppression effect at the frequency range over 800MHz which is important for sensitivity of mobile phones, and suppress radiation noise from LCD lines or camera module lines very well.
[cutoff frequency 130MHz, 180MHz, 200MHz type]
These products have good noise suppression effect at UHF range in addition to 800MHz range.
This characteristics works well at noise suppression for improvement of sensitivity at digital TVs.
3. Various cutoff frequency is available to control signal rise speed and signal fall speed.
4. circuits are built in 1.6x0.8mm chip size, it saves the large amount of mounting space.

■ Application

Noise suppression of LCD signal lines, camera module lines.

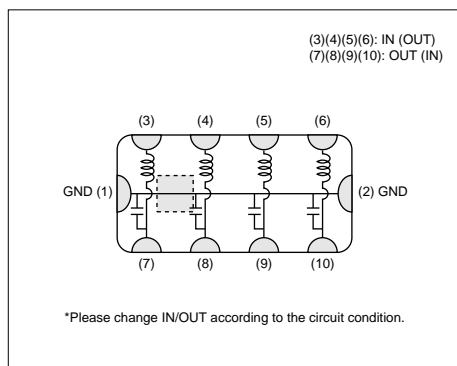


| Part Number | Cut-off Frequency (MHz) | Insertion Loss at Cut-off Frequency (dB) | Insertion Loss at 470MHz (min.) (dB) | Insertion Loss at 800MHz (min.) (dB) | Insertion Loss at 900MHz (min.) (dB) | Insulation Resistance (min.) (M ohm) | Rated Voltage (Vdc) | Rated Current (mA) | Withstand Voltage (Vdc) |
|-----------------|-------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------|--------------------|-------------------------|
| NFA18SL137V1A45 | 130 | 6 max | 25 | - | 25 | 1000 | 10 | 50 | 30 |
| NFA18SL187V1A45 | 180 | 6 max | 20 | - | 20 | 1000 | 10 | 50 | 30 |
| NFA18SL207V1A45 | 200 | 6 max | 15 | - | 15 | 1000 | 10 | 50 | 30 |
| NFA18SL307V1A45 | 300 | 6 max | - | 20 | 20 | 1000 | 10 | 100 | 30 |
| NFA18SL407V1A45 | 400 | 6 max | - | 18 | 18 | 1000 | 10 | 100 | 30 |
| NFA18SL487V1A45 | 480 | 6 max | - | 15 | 15 | 1000 | 10 | 100 | 30 |

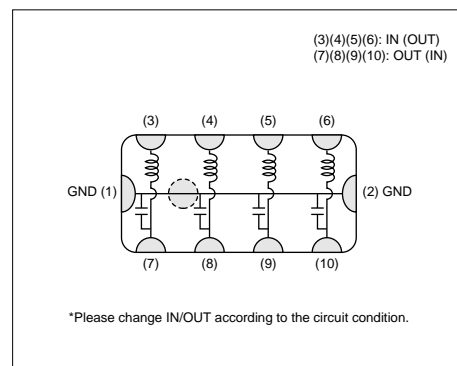
Operating Temperature Range: -40°C to +85°C Number of Circuits: 4

■ Equivalent Circuit

NFA18SL 137/187/207 V1A45



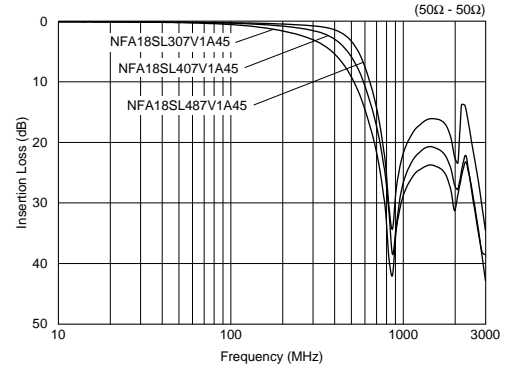
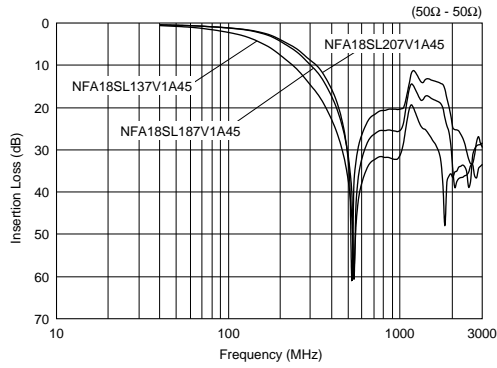
NFA18SL 307/407/487 V1A45



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■ Insertion Loss Characteristics



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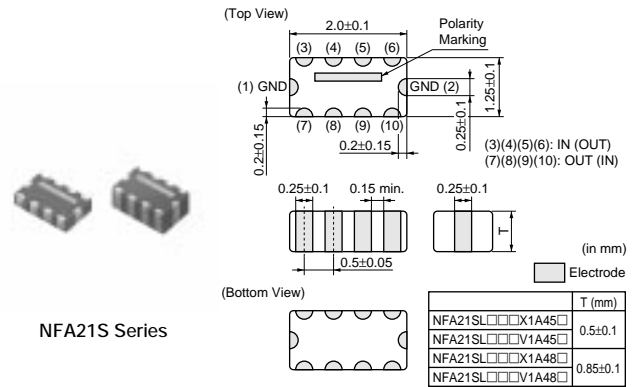
NFA21S Series

■ Features

1. Steep insertion loss characteristics
2. Suitable for noise suppression in 800MHz or higher frequency
3. Size: 2.0x1.25mm
4. 4 circuits in one package

■ Applications

Noise suppression for LCD line

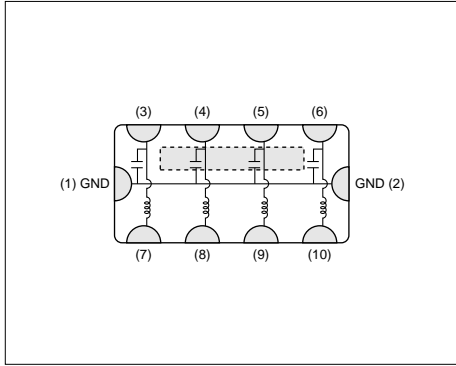


NFA21S Series

| Part Number | Cut-off Frequency (MHz) | Insertion Loss at Cut-off Frequency (dB) | Insertion Loss at 500MHz (min.) (dB) | Insertion Loss at 800MHz (min.) (dB) | Insertion Loss at 900MHz (min.) (dB) | Insertion Loss at 1000MHz (min.) (dB) | Insulation Resistance (min.) (M ohm) | Rated Voltage (Vdc) | Rated Current (mA) | Withstand Voltage (Vdc) |
|-----------------|-------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|---------------------|--------------------|-------------------------|
| NFA21SL506X1A48 | 50 | 0 to 6 | 30 | - | - | 20 | 1000 | 10 | 20 | 30 |
| NFA21SL806X1A48 | 80 | 2 to 7 | 25 | - | - | 25 | 1000 | 10 | 20 | 30 |
| NFA21SL207X1A45 | 200 | 2 to 7 | 13 | 25 | - | 25 | 1000 | 10 | 100 | 30 |
| NFA21SL207X1A48 | 200 | 2 to 7 | 13 | 25 | - | 25 | 1000 | 10 | 100 | 30 |
| NFA21SL307X1A45 | 300 | 2 to 7 | 7 | 20 | - | 25 | 1000 | 10 | 100 | 30 |
| NFA21SL307X1A48 | 300 | 2 to 7 | 7 | 20 | - | 25 | 1000 | 10 | 100 | 30 |
| NFA21SL287V1A45 | 280 | 6 max | - | 25 | 25 | - | 1000 | 10 | 100 | 30 |
| NFA21SL287V1A48 | 280 | 6 max | - | 25 | 25 | - | 1000 | 10 | 100 | 30 |
| NFA21SL317V1A45 | 310 | 6 max | - | 20 | 20 | - | 1000 | 10 | 100 | 30 |
| NFA21SL317V1A48 | 310 | 6 max | - | 20 | 20 | - | 1000 | 10 | 100 | 30 |
| NFA21SL337V1A45 | 330 | 6 max | - | 15 | 15 | - | 1000 | 10 | 100 | 30 |
| NFA21SL337V1A48 | 330 | 6 max | - | 20 | 20 | - | 1000 | 10 | 100 | 30 |

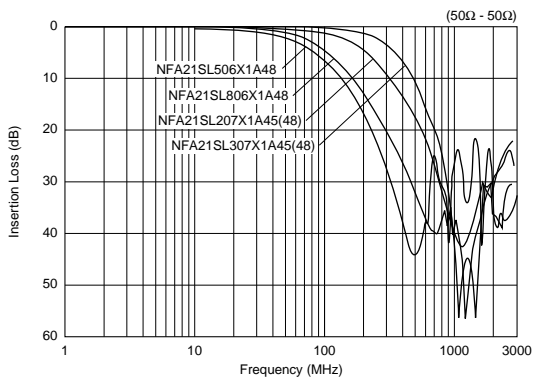
Operating Temperature Range: -55°C to +125°C Number of Circuits: 4

Equivalent Circuit

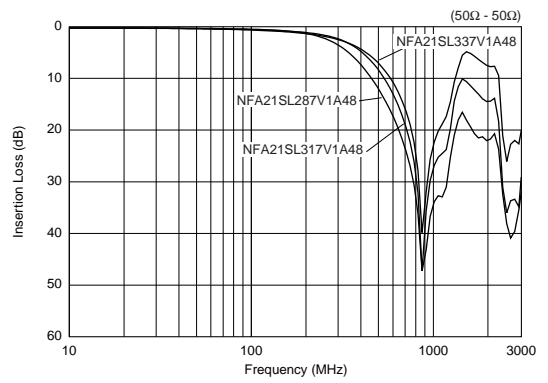


Insertion Loss Characteristics

NFA21SL_X Series



NFA21SL_V_48 Series



NFA21SL_V_45 Series

