

MURATA Chip Capacitor Type and LC Combined EMI Filters



CHIP CAPACITOR TYPE EMI FILTERS

NFM21CC Series - 0805 Case Size

The "EMIFIL" NFM21C series is a chip type three terminal EMI suppression filter. It can reduce residual inductance to an extremely low level making it excellent for noise suppression at high frequencies.

Applications:

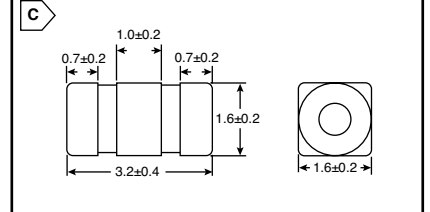
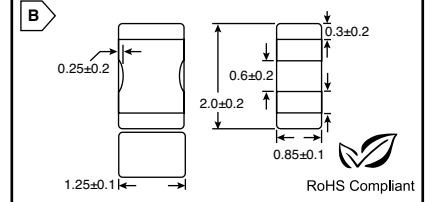
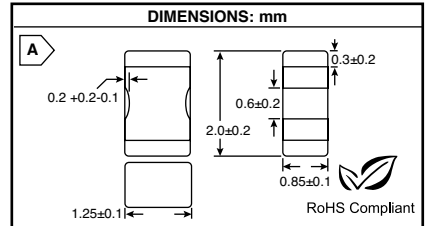
- PCs and peripherals which emit high amounts of noise
- Compact size equipment such as PDA, PC card and mobile telecommunications equipment
- Severe EMI suppression and high impedance circuits such as digital circuits

Features:

- Three terminal structure enables high performance in high frequency range
- Uses original electrode structure which realizes excellent solderability

For quantities of 8000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Volt (DC)	Rated Current (mA)	Price Each			Reel Qty.	Price Per Piece
						1	100	500		
81-NFM21CC220U1H3D	NFM21CC220U1H3D	A	22	50	.7	.77	.404	.289	4000	.168
81-NFM21CC470U1H3D	NFM21CC470U1H3D	A	47	50	.7	.77	.404	.289	4000	.168
81-NFM21CC101U1H3D	NFM21CC101U1H3D	A	100	50	.7	.77	.404	.289	4000	.168
81-NFM21CC221R1H3D	NFM21CC221R1H3D	A	220	50	.7	.71	.37	.264	4000	.154
81-NFM21CC471R1H3D	NFM21CC471R1H3D	A	470	50	1.0	.71	.37	.264	4000	.154
81-NFM21CC102R1H3D	NFM21CC102R1H3D	A	1000	50	1.0	.71	.37	.264	4000	.154
81-NFM21CC222R1H3D	NFM21CC222R1H3D	A	2200	50	1.0	.71	.37	.264	4000	.154
81-NFM21CC223R1H3D	NFM21CC223R1H3D	A	22000	50	2.0	.71	.37	.264	4000	.154



NFM21PC Series - 0805 Case Size

NFM21P is a three terminal structure component. This product can be applied to large current DC power lines. NFM21P is suitable for noise suppression of DC power lines where relatively large current operates.

Features:

- The rated current of 4A is suitable for IC's individual power lines
- Murata's original internal electrode structure design realizes excellent EMI suppression effects from low frequency to high frequency

For quantities of 8000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Volt (DC)	Rated Current (mA)	Price Each			Reel Qty.	Price Per Piece
						1	100	500		
81-NFM21PC104R1E3D	NFM21PC104R1E3D	A	0.1	25	2	.56	.269	.172	4000	.094
81-NFM21PC474R1C3D	NFM21PC474R1C3D	B	0.47	16	2	.67	.32	.205	4000	.112
81-NFM21PC105B1A3D	NFM21PC105B1A3D	B	1	10	4	.56	.31	.25	4000	.152

NFE31PT Series - 1206 Case Size

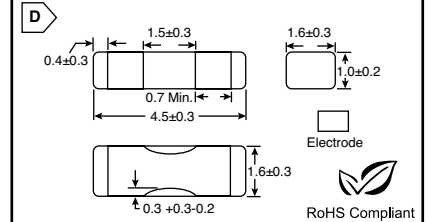
The "EMIFIL" NFE31P is a small size T-type circuit EMI suppression filter.

Features:

- Its large rated current of 6A and low voltage drop due to small DC resistance are suitable for DC power line use
- The feedthrough capacitor realizes excellent high frequency characteristics
- The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits

For quantities of 4000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Volt (DC)	Rated Current (mA)	Price Each			Reel Qty.	Price Per Piece
						1	100	500		
81-NFE31PT220R1E9L	NFE31PT220R1E9L	C	22	25	6	.90	.516	.416	2000	.251
81-NFE31PT470C1E9L	NFE31PT470C1E9L	C	47	25	6	.90	.516	.416	2000	.251
81-NFE31PT101C1E9L	NFE31PT101C1E9L	C	100	25	6	.90	.516	.416	2000	.251
81-NFE31PT221D1E9L	NFE31PT221D1E9L	C	220	25	6	.90	.516	.416	2000	.251
81-NFE31PT471F1E9L	NFE31PT471F1E9L	C	470	25	6	.90	.516	.416	2000	.251
81-NFE31PT152Z1E9L	NFE31PT152Z1E9L	C	1500	25	6	.90	.516	.416	2000	.251
81-NFE31PT222Z1E9L	NFE31PT222Z1E9L	C	2200	25	6	.90	.516	.416	2000	.251



NFM41PC Series - 1806 Case Size

The "EMIFIL" NFM41P series consists of three terminal structure. These components are able to be applied to large current DC power lines. NFM41P series are suitable in noise suppression in DC lines where relatively large currents operate.

Applications:

- Personal computers, word processors and peripherals
- Telephones, PCs, communication equipment, etc.
- Digital TVs, VCRs
- Telecommunications equipment

For quantities of 8000 and up, call for quote.

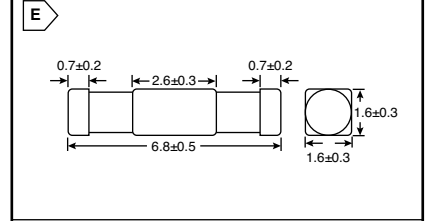
MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Volt (DC)	Rated Current (mA)	1	100	500	Reel Qty.	Price Per Piece
81-NFM41PC204F1H	NFM41PC204F1H3L	D	0.2	50	2	1.35	.825	.67	4000	.418

NFE61PT Series - 2606 Case Size

- The NFE61PT series has large rated current of 2A and low voltage drop due to small DC resistance suitable for power line use
- The feedthrough capacitor realizes excellent high frequency characteristics
- The structure incorporates built-in ferrite beads which minimize resonance with surrounding circuits

For quantities of 5000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Volt (DC)	Rated Current (mA)	Price Each			Reel Qty.	Price Per Piece
						1	100	500		
81-NFE61PT330B1H9L	NFE61PT330B1H9L	E	33	50	2	1.05	.645	.523	2500	.327
81-NFE61PT101Z1H9L	NFE61PT101Z1H9L	E	100	50	2	1.05	.645	.523	2500	.327
81-NFE61PT181B1H9L	NFE61PT181B1H9L	E	180	50	2	1.05	.64	.523	2500	.327
81-NFE61PT361B1H9L	NFE61PT361B1H9L	E	360	50	2	1.05	.645	.523	2500	.327
81-NFE61PT681B1H9L	NFE61PT681B1H9L	E	680	50	2	1.05	.645	.523	2500	.327
81-NFE61PT102E1H9L	NFE61PT102E1H9L	E	1000	50	2	1.05	.645	.523	2500	.327
81-NFE61PT472C1H9L	NFE61PT472C1H9L	E	4700	50	2	1.28	.784	.637	2500	.398



LC COMBINED CHIP EMIFIL

NFL18ST Series

The NFL18ST series is an EMI suppression filter for high speed signal lines, achieving T-type structure in 1.6x0.8mm size with Murata's multilayer technology.

Applications:

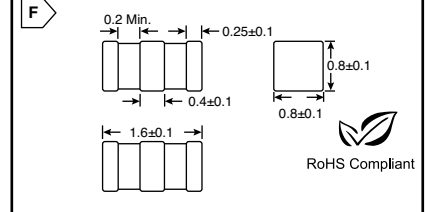
- Noise suppression for video signal lines (RGB lines) and high speed clock lines

Features:

- Steep insertion loss characteristics realize excellent noise suppression and prevent distortion of signal waveform
- By minimizing stray capacitance of inductor, achieves high performance in noise suppression in high frequency range

For quantities of 8000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Cut-Off Freq. (MHz)	Value (pF)	Inductance (nH)	Volt (DC)	Current (mA)	Price Each			Reel Qty.	Price Per Piece
								1	100	500		
81-NFL18ST507X1C3D	NFL18ST507X1C3D	F	500	10	43	16	200	.84	.484	.39	4000	.236
81-NFL18ST307X1C3D	NFL18ST307X1C3D	F	300	18	62	16	200	.84	.484	.39	4000	.235
81-NFL18ST157X1C3D	NFL18ST157X1C3D	F	150	32	140	16	100	.84	.484	.39	4000	.235

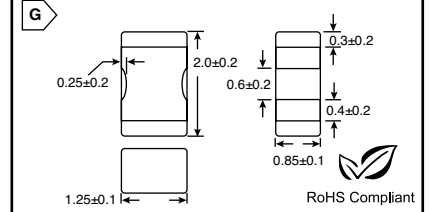


NFL21SP Series

- Suppresses noise with little attenuation of the signal itself due to its steep filtering characteristics
- Murata's original internal structure design enables excellent noise suppression up to high frequencies

For quantities of 8000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Value (pF)	Inductance (nH)	Volt (DC)	Current (mA)	Price Each			Reel Qty.	Price Per Piece	
							1	100	500			
81-NFL21SP407X1C3D	NFL21SP407X1C3D	G	400	16	34	16	300	.59	.31	.221	4000	.129
81-NFL21SP307X1C3D	NFL21SP307X1C3D	G	300	19	45	16	300	.59	.31	.221	4000	.129
81-NFL21SP107X1C3D	NFL21SP107X1C3D	G	100	44	135	16	200	.62	.328	.234	4000	.136
81-NFL21SP706X1C3D	NFL21SP706X1C3D	G	70	76	185	16	150	.79	.416	.297	4000	.173
81-NFL21SP506X1C3D	NFL21SP506X1C3D	G	50	84	305	16	150	.84	.443	.316	4000	.185

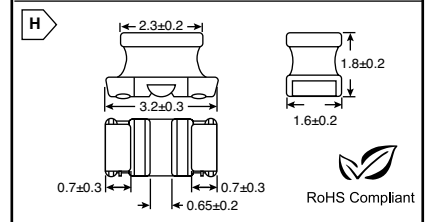


NFW31SP Series

The EMI filter NFW31S series consists of high performance EMI suppression filters. They are designed for noise suppression in high speed signal digital circuits in which the signal harmonics are prone to becoming noise sources. These filters achieve a 100dB/dec. (typ.) damping characteristic with Murata's innovative circuit design. This makes these chips effective in applications where the signal and noise frequencies are close to each other.

For quantities of 4000 and up, call for quote.

MOUSER STOCK NO.	Murata Part No.	Fig.	Nominal Cut-Off Freq. (MHz)	Attenuation @ MHz							Price Each	Reel Qty.	Price Per Piece		
				20	50	100	200	400	500	1000					
81-NFW31SP206X1E4L	NFW31SP206X1E4L	H	20	6	5	25	25	-	30	30	1.19	.728	.59	2000	.369
81-NFW31SP506X1E4L	NFW31SP506X1E4L	H	50	-	6	10	30	-	30	30	1.19	.728	.59	2000	.369
81-NFW31SP207X1E4L	NFW31SP207X1E4L	H	200	-	-	-	6	-	10	30	1.19	.728	.59	2000	.369
81-NFW31SP407X1E4L	NFW31SP407X1E4L	H	400	-	-	-	-	6	-	10	1.19	.728	.59	2000	.369
81-NFW31SP507X1E4L	NFW31SP507X1E4L	H	500	-	-	-	-	-	6	10	1.19	.728	.59	2000	.369



Murata EMI Suppression