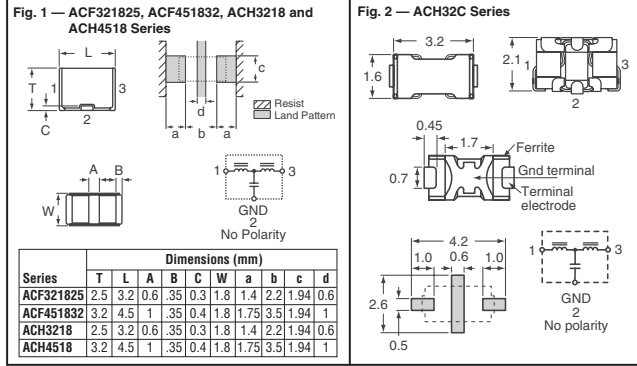




3-Terminal Filters for Signal Line and DC Power Line / SMD – ACF and ACH Series

Features: • The ACF and ACH series are T-type EMC filters incorporating ferrite chip beads and multilayer ceramic chip capacitors. • The external structure consists entirely of ferrite, enabling these parts to achieve superior attenuation characteristics despite their extremely compact dimensions. • Because they can be mounted on edge, the ACF and ACH series are ideal for high-density circuit configurations.

Dimensions in mm



Attenuation Frequency (MHz) Max.	I Max. (A)	Rdc Max. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 1,000	TDK Part No.	
Fig. 1 - ACF321825 Series, Operating Temperature -25°C - 85°C							
17	0.3	0.15	445-2059-1-ND	.37	3.18	14.68	171.30
27	0.3	0.15	445-2060-1-ND	.37	3.18	14.68	171.30
37	0.3	0.15	445-2061-1-ND	.37	3.18	14.68	171.30
45	0.3	0.15	445-2062-1-ND	.37	3.18	14.68	171.30
55	0.3	0.15	445-2063-1-ND	.37	3.18	14.68	171.30
65	0.3	0.15	445-2064-1-ND	.37	3.18	14.68	171.30
80	0.3	0.15	445-2065-1-ND	.37	3.18	14.68	171.30
100	0.3	0.15	445-2066-1-ND	.37	3.18	14.68	171.30
120	0.3	0.15	445-2067-1-ND	.37	3.18	14.68	171.30
145	0.3	0.15	445-2068-1-ND	.37	3.18	14.68	171.30
165	0.3	0.15	445-2069-1-ND	.37	3.18	14.68	171.30
200	0.3	0.15	445-2070-1-ND	.37	3.18	14.68	171.30
240	0.3	0.15	445-2071-1-ND	.37	3.18	14.68	171.30
300	0.3	0.15	445-2072-1-ND	.37	3.18	14.68	171.30
370	0.3	0.15	445-2073-1-ND	.37	3.18	14.68	171.30
450	0.3	0.15	445-2074-1-ND	.37	3.18	14.68	171.30
530	0.3	0.15	445-2075-1-ND	.37	3.18	14.68	171.30
650	0.3	0.15	445-2076-1-ND	.37	3.18	14.68	171.30

Attenuation Frequency (MHz) Max.	I Max. (A)	Rdc Max. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 1,000	TDK Part No.	
Fig. 1 - ACF451832 Series, Operating Temperature -25°C - 85°C							
12	0.3	0.15	445-2077-1-ND	.44	3.82	17.62	205.57
15	0.3	0.15	445-2078-1-ND	.44	3.82	17.62	205.57
18	0.3	0.15	445-2079-1-ND	.44	3.82	17.62	205.57
23	0.3	0.15	445-2080-1-ND	.44	3.82	17.62	205.57
35	0.3	0.15	445-2081-1-ND	.44	3.82	17.62	205.57
40	0.3	0.15	445-2082-1-ND	.44	3.82	17.62	205.57
50	0.3	0.15	445-2083-1-ND	.44	3.82	17.62	205.57
60	0.3	0.15	445-2084-1-ND	.44	3.82	17.62	205.57
75	0.3	0.15	445-2085-1-ND	.44	3.82	17.62	205.57
90	0.3	0.15	445-2086-1-ND	.44	3.82	17.62	205.57
105	0.3	0.15	445-2087-1-ND	.44	3.82	17.62	205.57
125	0.3	0.15	445-2088-1-ND	.44	3.82	17.62	205.57
150	0.3	0.15	445-2089-1-ND	.44	3.82	17.62	205.57
190	0.3	0.15	445-2090-1-ND	.44	3.82	17.62	205.57
230	0.3	0.15	445-2091-1-ND	.44	3.82	17.62	205.57
280	0.3	0.15	445-2092-1-ND	.44	3.82	17.62	205.57
340	0.3	0.15	445-2093-1-ND	.44	3.82	17.62	205.57
410	0.3	0.15	445-2094-1-ND	.44	3.82	17.62	205.46
500	0.3	0.15	445-2095-1-ND	.44	3.82	17.62	205.57
600	0.3	0.15	445-2096-1-ND	.44	3.82	17.62	205.57

Attenuation Frequency (MHz) Max.	I Max. (A)	Rdc Max. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 1,000	TDK Part No.	
Fig. 1 - ACH3218 Series, Operating Temperature -25°C - 85°C							
17	1.5	0.06	445-2097-1-ND	.37	3.18	14.68	171.30
27	1.5	0.06	445-2098-1-ND	.37	3.18	14.68	171.30
37	1.5	0.06	445-2099-1-ND	.37	3.18	14.68	171.30
45	1.5	0.06	445-2100-1-ND	.37	3.18	14.68	171.30
55	1.5	0.06	445-2101-1-ND	.37	3.18	14.68	171.34
65	1.5	0.06	445-2102-1-ND	.37	3.18	14.68	171.30
80	1.5	0.06	445-2103-1-ND	.37	3.18	14.68	171.30
100	1.5	0.06	445-2104-1-ND	.37	3.18	14.68	171.30
120	1.5	0.06	445-2105-1-ND	.37	3.18	14.68	171.30
145	1.5	0.06	445-2106-1-ND	.37	3.18	14.68	171.30
165	1.5	0.06	445-2107-1-ND	.37	3.18	14.68	171.30
200	1.5	0.06	445-2108-1-ND	.37	3.18	14.68	171.30
240	1.5	0.06	445-2109-1-ND	.37	3.18	14.68	171.34
300	1.5	0.06	445-2110-1-ND	.37	3.18	14.68	171.30
370	1.5	0.06	445-2111-1-ND	.37	3.18	14.68	171.30
450	1.5	0.06	445-2112-1-ND	.37	3.18	14.68	171.30
530	1.5	0.06	445-2113-1-ND	.37	3.18	14.68	171.30
650	1.5	0.06	445-2114-1-ND	.37	3.18	14.68	171.30

Attenuation Frequency (MHz) Max.	I Max. (A)	Rdc Max. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 1,000	TDK Part No.	
Fig. 1 - ACH4518 Series, Operating Temperature -25°C - 85°C							
12	2	0.04	445-2115-1-ND	.44	3.82	17.62	205.57
15	2	0.04	445-2116-1-ND	.44	3.82	17.62	205.57
18	2	0.04	445-2117-1-ND	.44	3.82	17.62	205.57
23	2	0.04	445-2118-1-ND	.44	3.82	17.62	205.57

Attenuation Frequency (MHz) Max.	I Max. (A)	Rdc Max. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 1,000	TDK Part No.	
35	2	0.04	445-2119-1-ND	.44	3.82	17.62	205.57
40	2	0.04	445-2120-1-ND	.44	3.82	17.62	205.57
50	2	0.04	445-2121-1-ND	.44	3.82	17.62	205.57
60	2	0.04	445-2122-1-ND	.44	3.82	17.62	205.57
75	2	0.04	445-2123-1-ND	.44	3.82	17.62	205.57
90	2	0.04	445-2124-1-ND	.44	3.82	17.62	205.57
105	2	0.04	445-2125-1-ND	.44	3.82	17.62	205.57
125	2	0.04	445-2126-1-ND	.44	3.82	17.62	205.57
150	2	0.04	445-2127-1-ND	.44	3.82	17.62	205.46
190	2	0.04	445-2128-1-ND	.44	3.82	17.62	205.57
230	2	0.04	445-2129-1-ND	.44	3.82	17.62	205.57
280	2	0.04	445-2130-1-ND	.44	3.82	17.62	205.57
340	2	0.04	445-2131-1-ND	.44	3.82	17.62	205.57
410	2	0.04	445-2132-1-ND	.44	3.82	17.62	205.57
500	2	0.04	445-2133-1-ND	.44	3.82	17.62	205.57
600	2	0.04	445-2134-1-ND	.44	3.82	17.62	205.57

* For Tape and Reel part number, change 1-ND to 2-ND.

Guaranteed Frequency Bandwidth (MHz)	Guaranteed Attenuation (dB)	I Max. (A)	Rdc Max. (mΩ)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 2,000	TDK Part No.		
Fig. 2 - ACH32C Series, Operating Temperature -40°C - 125°C									
3.5 - 150	-25	6	2	445-2988-1-ND	.41	3.54	16.35	190.94/M	ACH32C-104-T
10 - 300	-25	6	2	445-2997-1-ND	.41	3.54	16.35	190.94/M	ACH32C-333-T
30 - 300	-25	6	2	445-2996-1-ND	.41	3.54	16.35	190.94/M	ACH32C-103-T
55 - 300	-25	6	2	445-2995-1-ND	.41	3.54	16.35	190.94/M	ACH32C-222-T
100 - 500	-25	6	2	445-2994-1-ND	.41	3.54	16.35	190.94/M	ACH32C-102-T
200 - 800	-25	6	2	445-2993-1-ND	.41	3.54	16.35	190.94/M	ACH32C-331-T
450 - 1300	-20	6	2	445-2992-1-ND	.41	3.54	16.35	190.94/M	ACH32C-101-T
650 - 2500	-15	6	2	445-2991-1-ND	.41	3.54	16.35	190.94/M	ACH32C-470-T
1300 - 2500	-15	6	2	445-2990-1-ND	.41	3.54	16.35	190.94/M	ACH32C-220-T
2000 - 5500	-15	6	2	445-2989-1-ND	.41	3.54	16.35	190.94/M	ACH32C-100-T

* For Tape and Reel part number, change 1-ND to 2-ND.

3-Terminal Filters for Signal Line / SMD – MEM2012T Series



Features: • Multilayer chip EMC filter utilizing a T-type circuit. • Entirely monolithic structure results in high reliability. • Due to closed magnetic circuit architecture, high-density installation becomes possible and crosstalk generation is prevented. • Steep attenuation characteristic plot. Highly effective noise suppression. • Covers a wide range of frequencies. • Operating Temperature Range: -40°C - 85°C

Dimensions in mm

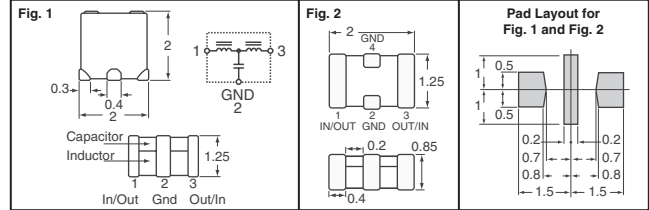


Fig.	Cut-off Freq. (MHz)	I Max. (A)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* Qty. Pricing*	TDK Part No.		
1	10	0.1	445-2135-1-ND	.19	1.66	7.64	1,000	MEM2012T10R0
	25	0.15	445-2136-1-ND	.19	1.66	7.64	1,000	MEM2012T25R0
	50	0.15	445-2137-1-ND	.19	1.66	7.64	1,000	MEM2012T50R0
	75	0.25	445-2138-1-ND	.37	3.18	14.68	1,000	MEM2012T75R0
	100	0.25	445-2139-1-ND	.19	1.66	7.64	1,000	MEM2012T101R
2	25	0.1	445-3357-1-ND	.18	1.58	7.27	4,000	MEM2012T25R0T0S1
	35	0.1	445-3358-1-ND	.18	1.58	7.27	4,000	MEM2012T35R0T0S1
	50	0.1	445-3359-1-ND	.18	1.58	7.27	4,000	MEM2012T50R0T0S1
	100	0.25	445-3360-1-ND	.18	1.58	7.27	4,000	MEM2012T101R0T0S1
	200	0.25	445-3361-1-ND	.18	1.58	7.27	4,000	MEM2012T201R0T0S1

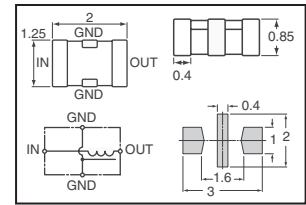
* For Tape and Reel part number, change 1-ND to 2-ND.

3-Terminal Filters for Signal Line / SMD – MEM2012D Series



This chip type EMC filter eliminates the noise component from a communication line. This noise component can be eliminated by inserting these products in series with the communication line. In comparison to earlier multilayer chip EMC filters, signal wave-form distortion is low after the signal has passed through the filter. Therefore this filter can be used for high speed pulse signal circuits and wide band analog RGB circuits.

Features: • Small size • Steep attenuation characteristic • Low distortion of signal after passing through filter • Capable of reflow soldering
Applications: • PCs • CRTs • LC display panels • Printers • Game machines • DVD equipment
Operating Temperature Range: -40°C - 85°C



Cut-off Frequency (MHz)	I Maximum (A)	Digi-Key Part No.	Cut Tape Pricing 1 10 50	Tape and Reel Pricing* 4,000	TDK Part No.	
200	0.2	445-3353-1-ND	.24	2.10	9.68	MEM2012D201R
300	0.2	445-3354-1-ND	.24	2.10	9.68	MEM2012D301R
400	0.2	445-3355-1-ND	.24	2.10	9.68	MEM2012D401R
500	0.2	445-3356-1-ND	.24	2.10	9.68	MEM2012D501R

* For Tape and Reel part number, change 1-ND to 2-ND.

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3-Terminal Filters for Wide-Band / SMD – MEM2012P Series



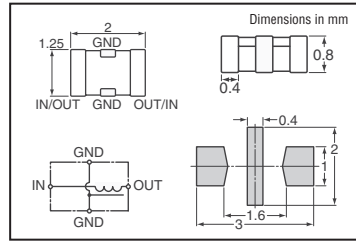
Features:

- Multilayer chip EMC filter that is small and low-profile due to the use of a π -type circuit
- Entirely monolithic structure results in high reliability
- Due to closed magnetic circuit architecture, high-density installation becomes possible, and crosstalk generation is prevented
- Steep attenuation characteristic plot, highly effective noise suppression
- Covers a wide range of frequencies
- π -type circuit with 1 coil / 2 capacitors construction

Applications:

- Computers
- Computer peripherals
- VCRs
- TVs
- Car audio equipment
- Printers
- Game machines

Operating Temperature Range: -40°C – 85°C



Cut-off Frequency (MHz)	I Maximum (A)	Digi-Key Part No.	Cut Tape Pricing			Tape and Reel Pricing* 4,000	TDK Part No.
			1	10	50		
10	0.2	445-3362-1-ND	.24	2.10	9.68	113.26/M	MEM2012P10R0
25	0.2	445-3363-1-ND	.24	2.10	9.68	113.26/M	MEM2012P25R0
50	0.2	445-3364-1-ND	.24	2.10	9.68	113.26/M	MEM2012P50R0
75	0.2	445-3365-1-ND	.24	2.10	9.68	113.26/M	MEM2012P75R0
100	0.2	445-3366-1-ND	.24	2.10	9.68	113.26/M	MEM2012P101R

* For Tape and Reel part number, change 1-ND to 2-ND.

3-Terminal Filters for Wide-Band / SMD – MEM2012TC Series



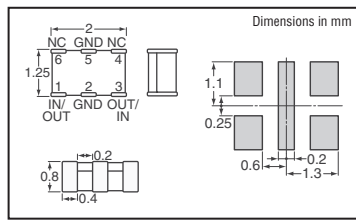
Features:

- Multilayer chip EMC filter utilizing a T-type circuit
- Entirely monolithic structure results in high reliability
- Due to closed magnetic circuit architecture, high-density installation becomes possible, and crosstalk generation is prevented
- Steep attenuation characteristic plot. Highly effective noise suppression
- Covers a wide range of frequencies
- Combines a bead inductor with a through-type capacitor

Applications:

- Computer and computer peripherals
- VCRs
- TVs
- Car audio equipment
- Printers
- Game machines

Operating Temperature Range: -40°C – 85°C



Cap. (pF) ±30%	I Maximum (mA)	Digi-Key Part No.	Cut Tape Pricing			Tape and Reel Pricing* 4,000	TDK Part No.
			1	10	50		
10	1	445-3367-1-ND	.24	2.10	9.68	113.26/M	MEM2012TC100
22	1	445-3368-1-ND	.24	2.10	9.68	113.26/M	MEM2012TC220
47	1	445-3369-1-ND	.24	2.10	9.68	113.26/M	MEM2012TC470
100	1	445-3370-1-ND	.24	2.10	9.68	113.26/M	MEM2012TC101
150	1	445-3371-1-ND	.24	2.10	9.68	113.26/M	MEM2012TC151

* For Tape and Reel part number, change 1-ND to 2-ND.

3-Terminal Filters for Wide-Band / SMD – MEM2012W Series



These SMD Type 3-terminal filters are used for elimination of high frequency noise from signal lines. Due to a higher cutoff frequency than earlier SMD type 3-terminal filters and steep attenuation characteristics, these filters are effective for elimination of a high level of high frequency noise.

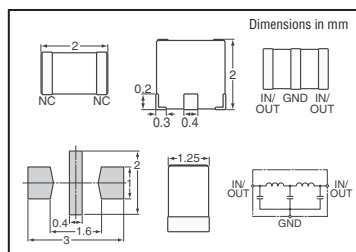
Features:

- Small size
- Entirely monolithic architecture

Applications:

- PCs
- Liquid crystal panels
- Printers
- Game machines
- Cellular phones
- Digital video cameras

Operating Temperature Range: -40°C – 85°C



Cut-off Frequency (MHz)	I Maximum (A)	Digi-Key Part No.	Cut Tape Pricing			Tape and Reel Pricing* 1,000	TDK Part No.
			1	10	50		
120	0.1	445-3372-1-ND	.30	2.62	12.11	141.57	MEM2012W121R
150	0.1	445-3373-1-ND	.30	2.62	12.11	141.57	MEM2012W151R
180	0.1	445-3374-1-ND	.30	2.62	12.11	141.57	MEM2012W181R
210	0.1	445-3375-1-ND	.30	2.62	12.11	141.57	MEM2012W211R
240	0.1	445-3376-1-ND	.30	2.62	12.11	141.57	MEM2012W241R

* For Tape and Reel part number, change 1-ND to 2-ND.

Common Mode Choke Coils for Signal Line / SMD – ZJYS Series



Features:

- A common mode filter for distortion-free noise removal from transmitted signals. Optimized for transmission of high quality signals
- Best filter for countering the common mode noise resulting from data signal processing by PCs, phone equipment, etc
- Due to a maximum current tolerance of 5A, can also be used to counter power line noise
- The ZJYS81R5-2PL is a high inductance common mode filter designed to use with a CAN-BUS

Fig. 1 — ZJYS51R5-2P, -2PB, -2PL

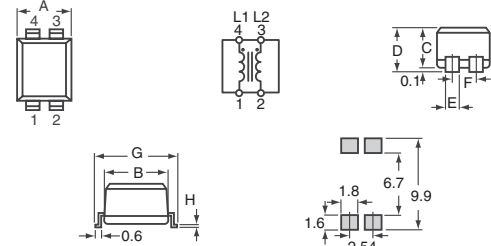


Fig. 2 — ZJYS51R5-4P, -M4PA

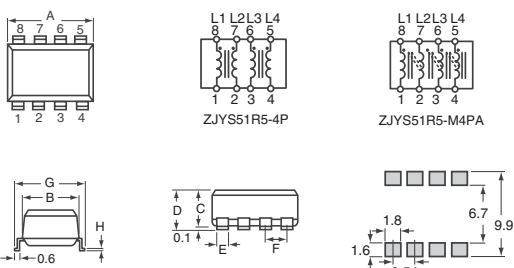


Fig. 3 — ZJYS81R5-2PL25-G01, -2PL51-G01

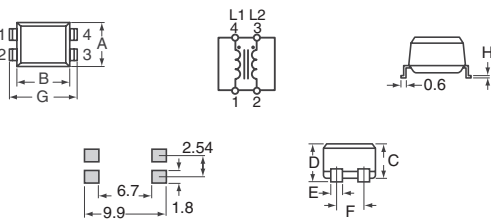


Fig.	Dimensions - mm								TDK Part No.
	A (Max.)	B (Max.)	C (Max.)	D (Max.)	E	F	G (Max.)	H	
1	5.5	6.86	4.57	5.08	1.3	2.54	9	0.25	ZJYS51R5-2P, -2PB, -2PL
2	10.5	6.86	4.57	5.08	1.3	2.54	9	0.25	ZJYS51R5-4P, -M4PA
3	6	7.1	4.5	5	1.3	2.54	9	0.25	ZJYS81R5-2PL25-G01, -2PL51-G01

Minimum Impedance Ω (MHz)	Rated Current I (A)	Digi-Key Part No.	Cut Tape Price Each			Tape and Reel* Qty.	TDK Part No.
			1	10	50		
Fig. 1 — 50V, Operating Temperature -25°C – 85°C							
200 (20 – 300)	2	445-2219-1-ND	.95	.83	.77	1,500	445.39/M ZJYS51R5-2PT-01
200 (20 – 300)	2	445-2220-1-ND	1.10	.96	.89	1,500	513.91/M ZJYS51R5-2PBT-01
200 (20 – 300)	2	445-2221-1-ND	1.03	.90	.83	1,500	479.64/M ZJYS51R5-2PLT-01

Fig. 2 — 50V, Operating Temperature -25°C – 85°C							
200 (20 – 300)	2	445-2224-1-ND	1.61	1.40	1.30	1,000	753.73 ZJYS51R5-4PT-01
200 (20 – 300)	0.5	445-2225-1-ND	1.61	1.40	1.30	1,000	753.73 ZJYS51R5-MPAT-01

Fig. 3 — 80V, Operating Temperature -40°C – 125°C							
600 (10 – 100)	0.5	445-2222-1-ND	1.10	.96	.89	1,500	513.91/M ZJYS81R5-2PL25T-G01
1000 (10 – 100)	0.5	445-2223-1-ND	1.10	.96	.89	1,500	513.91/M ZJYS81R5-2PL51T-G01

* For Tape and Reel part number, change 1-ND to 2-ND.

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