

SMD Common Mode 2-Lines Chokes AWCM Series



Product features

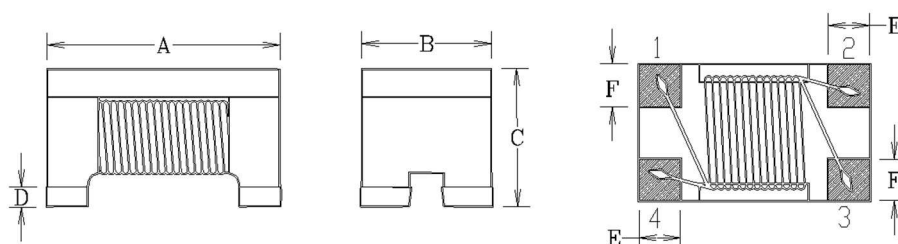
- Excellent common mode noise attenuation
- Wide common mode noise impedance range for flexible noise matching
- Impedance ranges from 90 ohms to 5000+ ohms
- Inductance Range from 11 μ H to 200 μ H
- RoHS compliant, halogen-free
- Operating temperature: -40°C to $+125^{\circ}\text{C}$

Applications

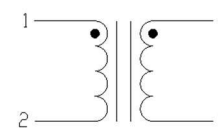
- USB, HDMI, DisplayPort, and other differential signal lines
- General-purpose EMI filtering in industrial and consumer electronics
- CAN, Ethernet, and communication lines in non-automotive systems
- Power management circuits, sensors, and control boards

Mechanicals

Dimensions (mm)



Schematics



Series	A	B	C	D (ref)	E (ref)	F (ref)
AWCM1210	1.2 $\pm$ 0.2	1.0 $\pm$ 0.2	0.9max	0.03	0.35	0.25
AWCM2012	2.0 $\pm$ 0.2	1.2 $\pm$ 0.2	1.2 $\pm$ 0.2	0.20	0.55	0.46
AWCM3216	3.2 $\pm$ 0.2	1.6 $\pm$ 0.2	1.9 $\pm$ 0.2	0.20	0.70	0.60
AWCM3416	3.4 $\pm$ 0.2	1.6 $\pm$ 0.2	1.9 $\pm$ 0.2	0.20	0.64	0.66
AWCM3225	3.2 $\pm$ 0.2	2.5 $\pm$ 0.2	2.1 $\pm$ 0.2	0.20	0.80	0.90
AWCM4532	4.5 $\pm$ 0.2	3.2 $\pm$ 0.2	2.8 $\pm$ 0.2	0.20	1.00	1.20
AWCM3225L	3.2 $\pm$ 0.2	2.5 $\pm$ 0.2	2.1 $\pm$ 0.2	0.20	0.80	0.90
AWCM4532L	4.5 $\pm$ 0.2	3.2 $\pm$ 0.2	2.8 $\pm$ 0.2	0.20	1.00	1.20

Specifications AWC1210Series

Part Number	Impedance(Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (A)Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM1210-900TF	90 $\pm$ 25%	0.40	0.20	50	10

Specifications AWC2012 Series

Part Number	Impedance(Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (A)Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM2012-300TF	30 $\pm$ 25%	0.20	0.45	50	10
AWCM2012-670TF	67 $\pm$ 25%	0.25	0.40	50	10
AWCM2012-900TF	90 $\pm$ 25%	0.30	0.40	50	10
AWCM2012-121TF	120 $\pm$ 25%	0.30	0.37	50	10
AWCM2012-161TF	160 $\pm$ 25%	0.35	0.33	50	10
AWCM2012-181TF	180 $\pm$ 25%	0.35	0.33	50	10
AWCM2012-201TF	200 $\pm$ 25%	0.40	0.30	50	10
AWCM2012-221TF	220 $\pm$ 25%	0.40	0.30	50	10
AWCM2012-261TF	260 $\pm$ 25%	0.40	0.30	50	10
AWCM2012-361TF	360 $\pm$ 25%	0.45	0.28	50	10
AWCM2012-601TF	600 $\pm$ 25%	0.60	0.22	50	10
AWCM2012-801TF	800 $\pm$ 25%	0.80	0.30	50	10
AWCM2012-102TF	1000 $\pm$ 25%	1.30	0.15	50	10

Specifications AWC3216 Series

Part Number	Impedance(Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (A)Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM3216-900TF	90 $\pm$ 25%	0.30	0.37	50	10
AWCM3216-121TF	120 $\pm$ 25%	0.30	0.35	50	10
AWCM3216-161TF	160 $\pm$ 25%	0.40	0.34	50	10
AWCM3216-221TF	220 $\pm$ 25%	0.45	0.30	50	10
AWCM3216-261TF	260 $\pm$ 25%	0.50	0.31	50	10
AWCM3216-361TF	360 $\pm$ 25%	0.60	0.30	50	10
AWCM3216-601TF	600 $\pm$ 25%	0.80	0.26	50	10
AWCM3216-801TF	800 $\pm$ 25%	0.90	0.24	50	10
AWCM3216-102TF	1000 $\pm$ 25%	1.00	0.23	50	10
AWCM3216-142TF	1400 $\pm$ 25%	1.00	0.22	50	10
AWCM3216-202TF	2000 $\pm$ 25%	1.20	0.20	50	10
AWCM3216-222TF	2200 $\pm$ 25%	1.20	0.20	50	10

Specifications AWCM3416 Series **NEW**

Part Number	Inductance(μ H) Min	DCR (Ω) Max.	Rated Current (A)	Insulation Resistance (M Ω) Min.
AWCM3416-400TF	40	1.70	0.20	10
AWCM3416-600TF	60	1.70	0.20	10

Notes:

1. All test data is reference to 25°C ambient.
2. Test Condition:100KHz,1.0Vrms.

Specifications AWCM3225 Series

Part Number	Impedance(Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (A) Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM3225-800TF	80 $\pm$ 25%	0.12	0.64	50	10
AWCM3225-161TF	160 $\pm$ 25%	0.15	0.48	50	10
AWCM3225-271TF	270 $\pm$ 25%	0.25	0.45	50	10
AWCM3225-501TF	500 $\pm$ 25%	0.30	1.00	50	10
AWCM3225-601TF	600 $\pm$ 25%	0.20	1.00	50	10
AWCM3225-801TF	800 $\pm$ 25%	0.35	0.35	50	10
AWCM3225-102TF	1000 $\pm$ 25%	0.35	0.48	50	10

Specifications AWCM4532 Series

Part Number	Impedance(Ω) @ 100 MHz	DCR (Ω) Max.	Rated Current (A)Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM4532-800TF	80 $\pm$ 25%	0.05	3.00	50	10
AWCM4532-900TF	90 $\pm$ 25%	0.09	3.00	50	10
AWCM4532-121TF	120 $\pm$ 25%	0.10	3.00	50	10
AWCM4532-201TF	200 $\pm$ 25%	0.10	1.50	50	10
AWCM4532-221TF	220 $\pm$ 25%	0.10	1.30	50	10
AWCM4532-331TF	330 $\pm$ 25%	0.11	1.10	50	10
AWCM4532-601TF	600 $\pm$ 25%	0.12	1.00	50	10
AWCM4532-701TF	700 $\pm$ 25%	0.12	1.50	50	10
AWCM4532-801TF	800 $\pm$ 25%	0.16	0.90	50	10
AWCM4532-901TF	900 $\pm$ 25%	0.17	1.00	50	10
AWCM4532-102TF	1000 $\pm$ 25%	0.18	0.80	50	10
AWCM4532-142TF	1400 $\pm$ 25%	0.20	0.70	50	10

Specifications AWCM3225L Series

Part Number	Z(Ω) Min@10MHz	L(μ H) +50%/-30% @100KHz/0.1V	DCR (Ω) Max.	Rated Current (A) Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM3225L-110TF	300	11	0.40	0.30	50	10
AWCM3225L-220TF	500	22	0.50	0.25	50	10
AWCM3225L-510TF	1000	51	0.70	0.20	50	10
AWCM3225L-101TF	2000	100	1.50	0.15	50	10
AWCM3225L-201TF	8000	200	4.80	0.07	50	10

Specifications AWCM4532L Series

Part Number	Z(Ω) Min@10MHz	L(μ H) +50%/-30% @100KHz/0.1V	DCR (Ω) Max.	Rated Current (A) Max.	Rated Voltage (V)	Insulation Resistance(M Ω) Min.
AWCM4532L-110TF	300	11	0.60	0.36	50	10
AWCM4532L-220TF	500	22	1.00	0.31	50	10
AWCM4532L-510TF	1000	51	1.00	0.23	50	10
AWCM4532L-101TF	2000	100	2.00	0.20	50	10
AWCM4532L-201TF	5000	200	4.50	0.10	50	10