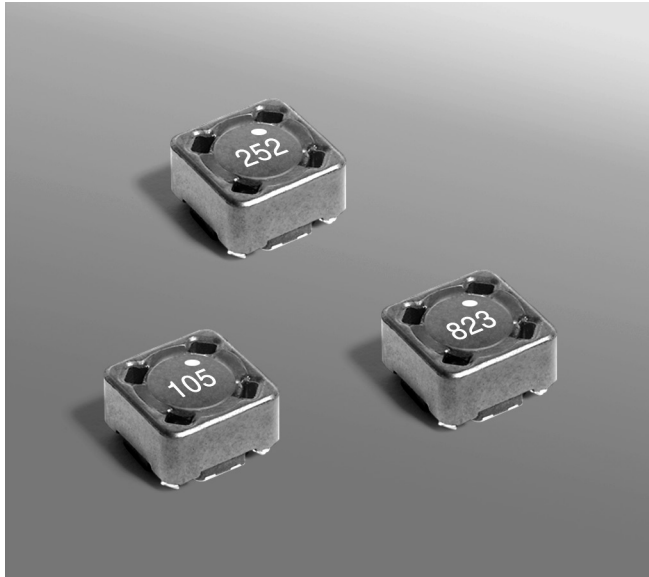


Common Mode Chokes – MSD7342



- Only 4.6 mm high and 7.5 mm square
- Ideal for use in both power line and signal line applications
- Common- and differential-mode filtering in a single device
- Up to 230 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications

Core material Ferrite

Weight 0.76 – 0.87g

Terminations RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.

Ambient temperature –40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise).

Storage temperature Component: –40°C to +125°C.

Tape and reel packaging: –40°C to +80°C

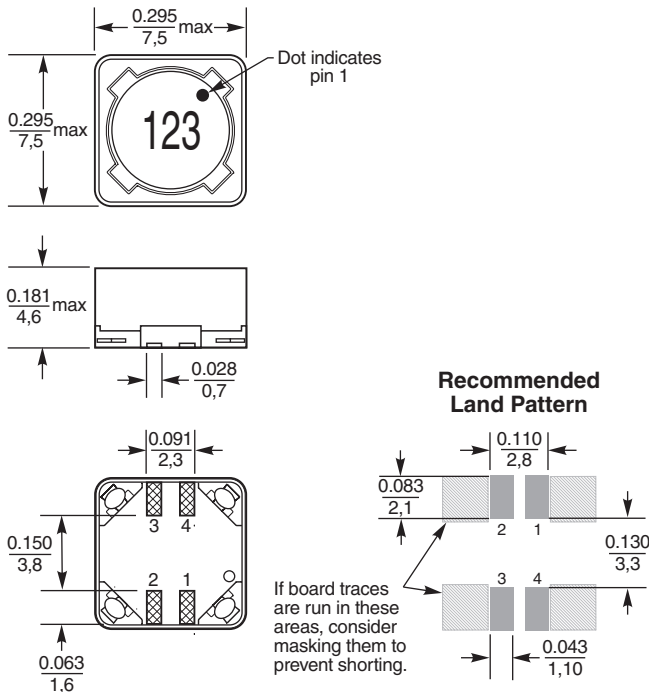
Winding to winding isolation 200 Vrms, one minute

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

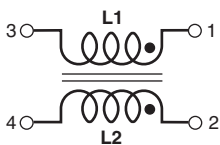
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 250/7" reel; 1000/13" reel Plastic tape: 16 mm wide, 0.4 mm thick, 12 mm pocket spacing, 4.9 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).



Dimensions are in $\frac{\text{inches}}{\text{mm}}$





Common Mode Chokes – MSD7342 Series

Partnumber ¹	Common mode impedance max (kOhms)	Cutoff ² frequency (MHz)	Inductance (µH) ³		DCR max ⁴ (Ohms)	Isolation (Vrms)	Irms (A)
			min	nom			
MSD7342-252ML_	3.07 @ 59 MHz	89	2.00	2.5	0.033	200	2.17
MSD7342-332ML_	3.86 @ 50 MHz	70	2.64	3.3	0.037	200	2.05
MSD7342-472ML_	4.93 @ 37 MHz	55	3.76	4.7	0.051	200	1.74
MSD7342-562ML_	5.96 @ 34 MHz	67	4.48	5.6	0.063	200	1.57
MSD7342-682ML_	7.85 @ 31 MHz	79	5.44	6.8	0.070	200	1.49
MSD7342-822ML_	9.09 @ 32 MHz	55	6.56	8.2	0.075	200	1.44
MSD7342-103ML_	9.15 @ 24 MHz	63	8.00	10	0.10	200	1.24
MSD7342-123ML_	11.85 @ 22 MHz	47	9.60	12	0.12	200	1.14
MSD7342-153ML_	14.43 @ 20 MHz	53	12.0	15	0.13	200	1.09
MSD7342-183ML_	18.24 @ 18 MHz	38	14.4	18	0.17	200	0.95
MSD7342-223ML_	18.37 @ 15 MHz	49	17.6	22	0.22	200	0.84
MSD7342-273ML_	25.63 @ 14 MHz	42	21.6	27	0.25	200	0.79
MSD7342-333ML_	26.26 @ 14 MHz	41	26.26	33	0.27	200	0.76
MSD7342-393ML_	35.44 @ 11 MHz	42	31.2	39	0.38	200	0.64
MSD7342-473ML_	34.38 @ 11 MHz	38	37.6	47	0.42	200	0.61
MSD7342-563ML_	41.03 @ 7.9 MHz	40	44.8	56	0.46	200	0.58
MSD7342-683ML_	70.55 @ 8.5 MHz	52	54.4	68	0.60	200	0.51
MSD7342-823ML_	84.57 @ 7.4 MHz	26	65.6	82	0.68	200	0.48
MSD7342-104ML_	89.05 @ 6.6 MHz	24	80.0	100	0.77	200	0.45
MSD7342-124ML_	101.4 @ 6.4 MHz	22	96.0	120	1.03	200	0.39
MSD7342-154ML_	121.2 @ 5.2 MHz	19	120	150	1.35	200	0.34
MSD7342-184ML_	141.5 @ 4.6 MHz	20	144	180	1.52	200	0.32
MSD7342-224ML_	133.0 @ 4.8 MHz	25	176	220	1.72	200	0.30
MSD7342-274ML_	103.7 @ 3.6 MHz	18	216	270	2.41	200	0.25
MSD7342-334ML_	131.7 @ 3.8 MHz	9.1	264	330	2.70	200	0.24
MSD7342-394ML_	145.9 @ 3.1 MHz	11	312	390	3.05	200	0.23
MSD7342-474ML_	187.2 @ 2.7 MHz	11	376	470	4.00	200	0.20
MSD7342-564ML_	204.4 @ 2.6 MHz	8.1	448	560	4.43	200	0.19
MSD7342-684ML_	210.0 @ 2.4 MHz	3.3	544	680	5.00	200	0.18
MSD7342-824ML_	251.8 @ 2.1 MHz	6.6	656	820	6.80	200	0.15
MSD7342-105ML_	276.1 @ 2.1 MHz	5.1	800	1000	7.80	200	0.14

1. When ordering, please specify **termination** and **packaging** codes:

MSD7342-105MLC

Termination: L = RoHS compliant matte tin over nickel over phos bronze.

Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2 Frequency at which the differential mode attenuation equals -3 dB

3 Inductance shown for each winding, measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.

4 DCR is for each winding.

5 Interwinding isolation (hipot) tested for one minute.

6 Current that causes a 40°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

9. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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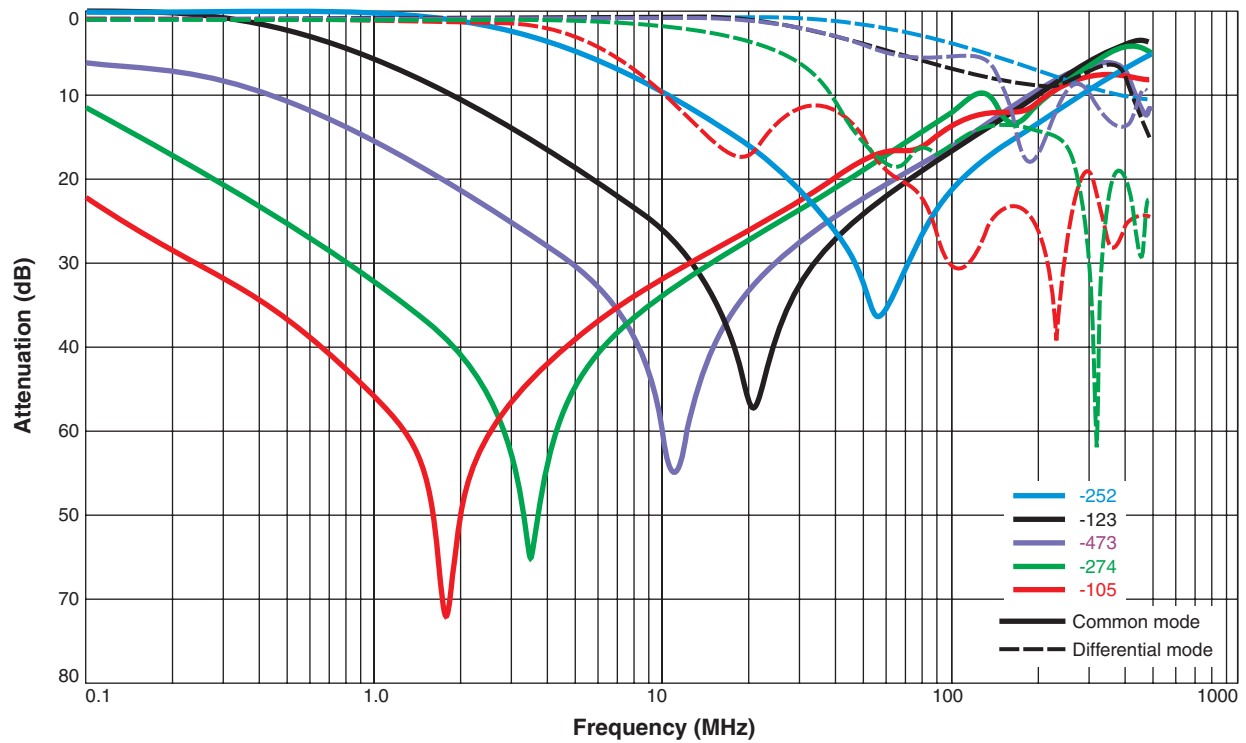
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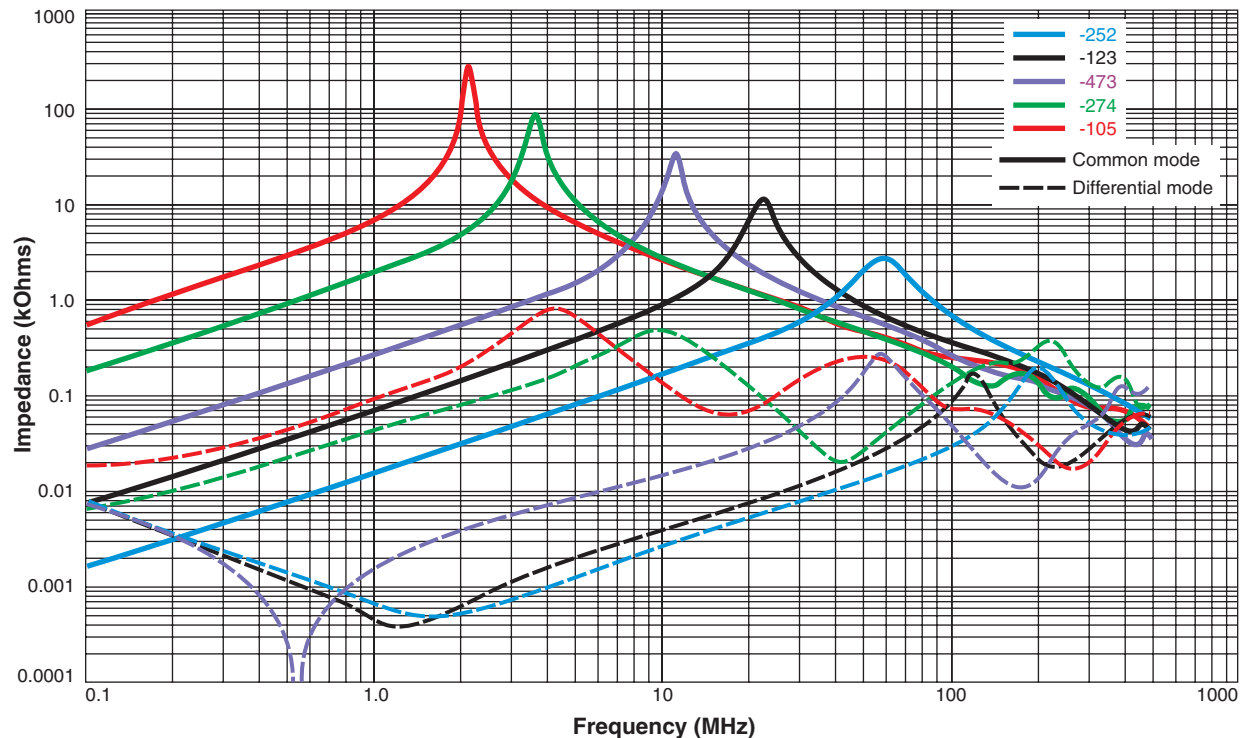


Common Mode Chokes – MSD7342 Series

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



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