

Common Mode Chokes – MSD1260



- Only 6.0 mm high and 12.3 mm square
- Ideal for use in both power line and signal line applications
- Common- and differential-mode filtering in a single device
- Up to 180 MHz differential mode cutoff frequency
- Can be used as coupled inductors for SEPIC applications

Core material Ferrite

Weight: 2.8 – 3.2 g

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

Ambient temperature -40°C to +85°C with 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 500 Vrms, one minute

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

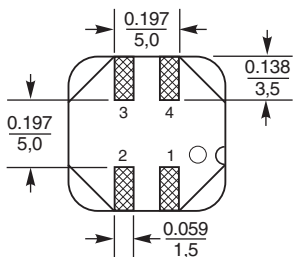
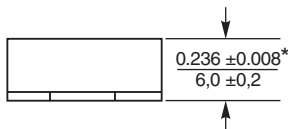
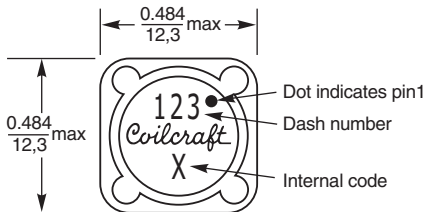
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

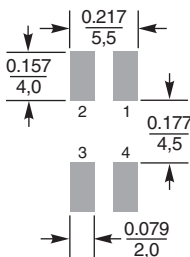
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 500/13" reel; Plastic tape: 24 mm wide, 0.35 mm thick, 16 mm pocket spacing, 6.6 mm pocket depth

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

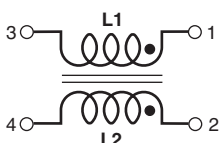


Recommended Land Pattern



* For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.012 inch (0,3 mm).

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





Common Mode Chokes – MSD1260 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			
MSD1260-472ML_	7.39 @ 43 MHz	180	3.76	4.7	0.036	500	3.16
MSD1260-562ML_	8.07 @ 33 MHz	160	4.48	5.6	0.040	500	3.00
MSD1260-682ML_	7.45 @ 21 MHz	100	5.44	6.8	0.048	500	2.75
MSD1260-822ML_	12.74 @ 27 MHz	120	6.56	8.2	0.052	500	2.63
MSD1260-103ML_	10.36 @ 19 MHz	95	8.00	10	0.060	500	2.45
MSD1260-123ML_	11.72 @ 18 MHz	74	9.60	12	0.074	500	2.21
MSD1260-153ML_	15.88 @ 21 MHz	75	12.0	15	0.085	500	2.06
MSD1260-183ML_	19.22 @ 17 MHz	58	14.4	18	0.097	500	1.93
MSD1260-223ML_	23.97 @ 17 MHz	68	17.6	22	0.116	500	1.76
MSD1260-273ML_	23.83 @ 13 MHz	48	21.6	27	0.124	500	1.70
MSD1260-333ML_	28.87 @ 13 MHz	43	26.4	33	0.134	500	1.64
MSD1260-393ML_	24.31 @ 11 MHz	39	31.2	39	0.142	500	1.59
MSD1260-473ML_	27.25 @ 10 MHz	45	37.6	47	0.174	500	1.44
MSD1260-563ML_	39.80 @ 8.9 MHz	33	44.8	56	0.198	500	1.35
MSD1260-683ML_	41.12 @ 7.7 MHz	31	54.4	68	0.216	500	1.29
MSD1260-823ML_	57.65 @ 8 MHz	31	65.6	82	0.274	500	1.15
MSD1260-104ML_	58.69 @ 6.5 MHz	21	80	100	0.322	500	1.06
MSD1260-124KL_	51.20 @ 4.9 MHz	24	108	120	0.418	500	0.93
MSD1260-154KL_	41.37 @ 4 MHz	29	135	150	0.476	500	0.87
MSD1260-184KL_	52.76 @ 4.3 MHz	19	162	180	0.536	500	0.82
MSD1260-224KL_	92.17 @ 4.5 MHz	33	198	220	0.691	500	0.72
MSD1260-274KL_	46.65 @ 3.3 MHz	27	243	270	0.806	500	0.67
MSD1260-334KL_	118.0 @ 3.4 MHz	32	297	330	1.09	500	0.57
MSD1260-394KL_	67.94 @ 2.4 MHz	14	351	390	1.20	500	0.55
MSD1260-474KL_	114.7 @ 2.7 MHz	13	423	470	1.59	500	0.48
MSD1260-564KL_	76.40 @ 2.3 MHz	11	504	560	1.81	500	0.45
MSD1260-684KL_	218.9 @ 2.5 MHz	14	612	680	2.06	500	0.42
MSD1260-824KL_	212.5 @ 2.2 MHz	4.9	738	820	2.65	500	0.37
MSD1260-105KL_	124.2 @ 1.8 MHz	6.6	900	1000	3.06	500	0.34

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

MSD1260-105KLD

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: D = 13" machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel).

B = Less than full reel. In tape, but not machine ready.

To have a leader and trailer added (\$25 charge), use code letter D instead.

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.

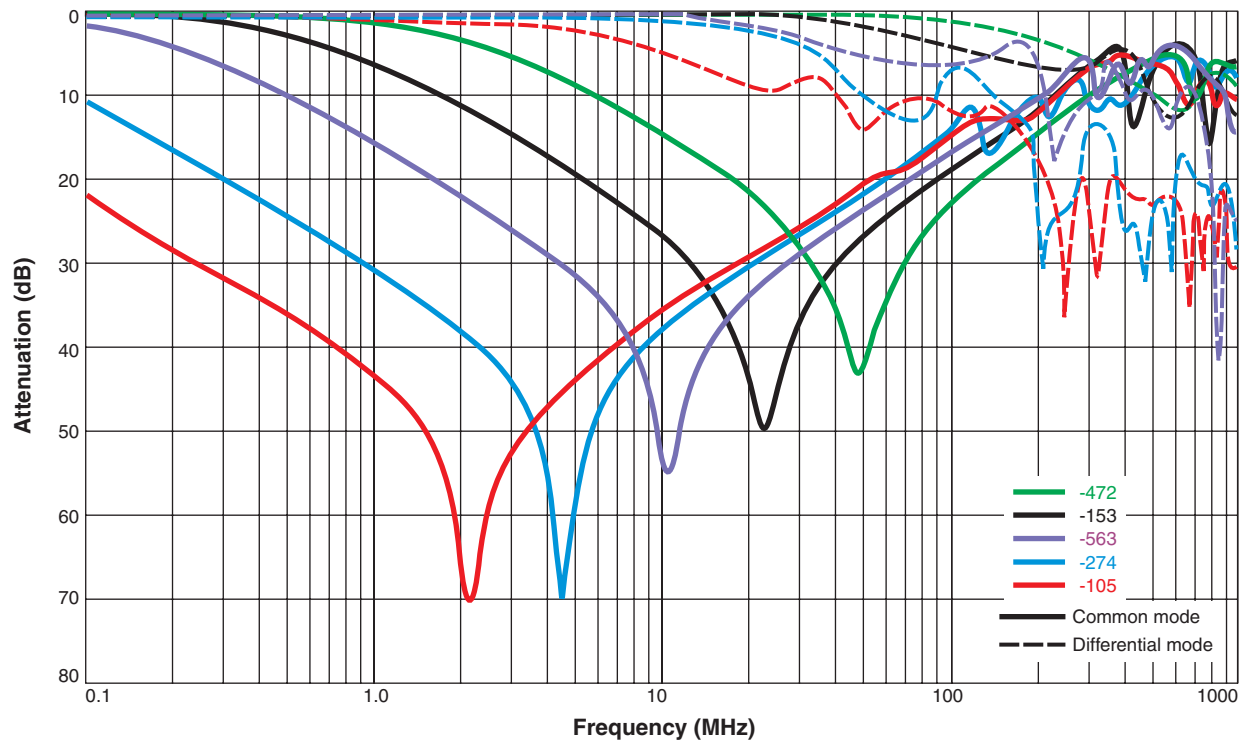
9. Electrical specifications at 25°C.

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

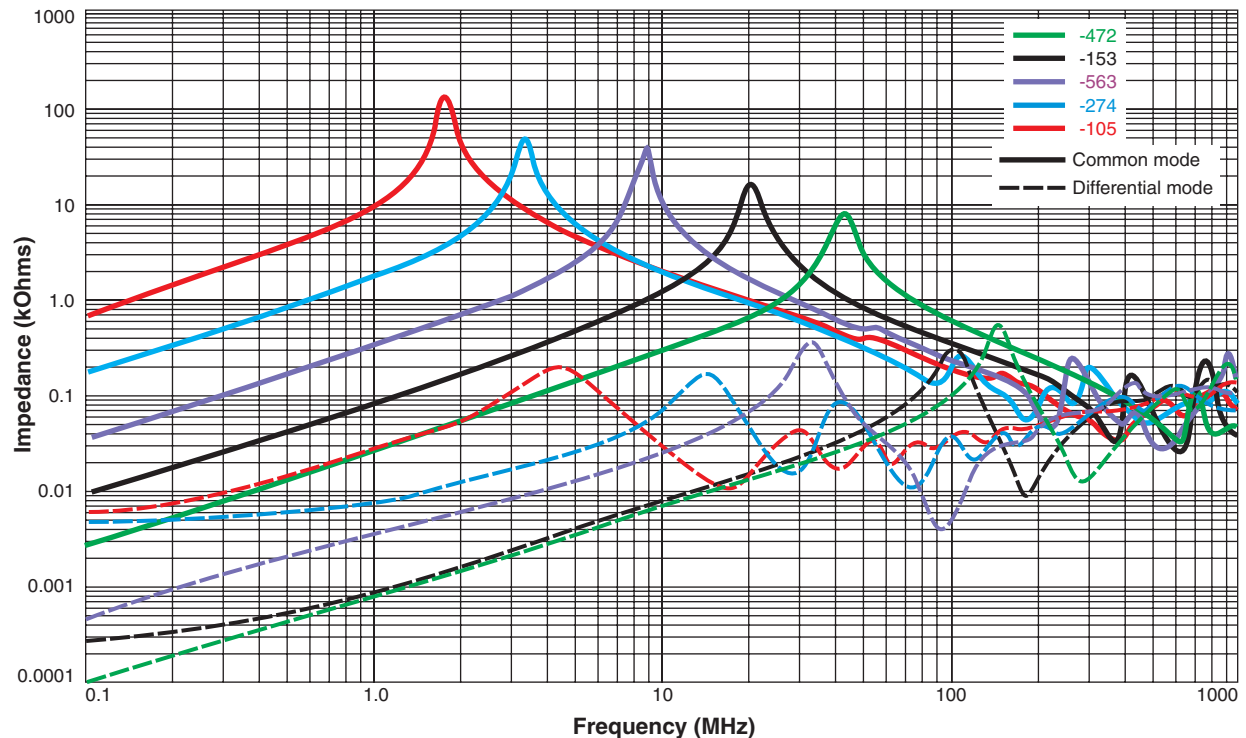


Common Mode Chokes – MSD1260 Series

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



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