RoHS/ REACH COMPLIANT

AEC Q200 +125°C

Common Mode Chokes – MSD1260T

- Only 6.0 mm high and 12.3 mm square
- AEC-Q200 Grade 1 (–40°C to +125°C)
- 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

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

Weight: 2.8 – 3.2 g

Ambient temperature –40°C to +125°C with Irms current

Maximum part temperature +165°C (ambient + temp rise)

Storage temperature Component: –40°C to +165°C. Tape and reel packaging: –40°C to +80°C

Winding-to-winding isolation 500 Vrms, one minute

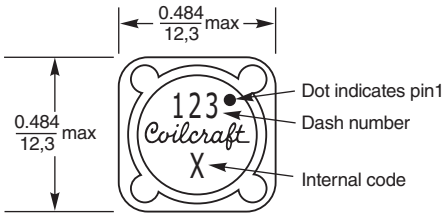
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

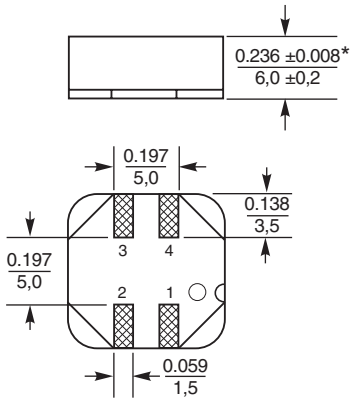
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 10.06 per billion hours / 9.940E+07 hours, calculated per Telcordia SR-332

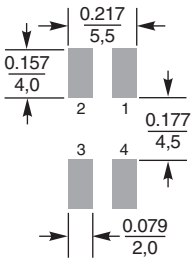
Packaging 500/13″ reel; Plastic tape: 24 mm wide, 0.5 mm thick, 16 mm pocket spacing, 6.9 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.



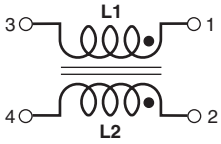


Recommended Land Pattern



* 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 inches / mm



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Common Mode Chokes – MSD1260T Series

Partnumber[1]	Common mode impedance max (kOhms)	Cutoff[2] frequency (MHz)	Inductance (µH)[3] min	Inductance (µH)[3] nom	DCR max[4] (Ohms)	Isolation[5] (Vrms)	Irms[6] (A)
MSD1260T-332ML_	5.29 @ 53 MHz	170	2.64	3.3	0.020	500	3.60
MSD1260T-472ML_	6.27 @ 43 MHz	140	3.76	4.7	0.036	500	3.16
MSD1260T-562ML_	8.38 @ 36 MHz	91	4.48	5.6	0.040	500	3.00
MSD1260T-682ML_	9.78 @ 33 MHz	120	5.44	6.8	0.048	500	2.75
MSD1260T-822ML_	9.72 @ 30 MHz	110	6.56	8.2	0.052	500	2.63
MSD1260T-103ML_	12.31 @ 26 MHz	110	8.00	10	0.060	500	2.45
MSD1260T-123ML_	14.67 @ 23 MHz	81	9.60	12	0.074	500	2.21
MSD1260T-153ML_	16.17 @ 21 MHz	77	12.0	15	0.085	500	2.06
MSD1260T-183ML_	16.96 @ 18 MHz	64	14.4	18	0.097	500	1.93
MSD1260T-223ML_	20.73 @ 17 MHz	79	17.6	22	0.116	500	1.76
MSD1260T-273ML_	26.07 @ 15 MHz	58	21.6	27	0.124	500	1.70
MSD1260T-333ML_	26.15 @ 12 MHz	58	26.4	33	0.134	500	1.64
MSD1260T-393ML_	30.30 @ 12 MHz	36	31.2	39	0.142	500	1.59
MSD1260T-473ML_	29.81 @ 11 MHz	53	37.6	47	0.174	500	1.44
MSD1260T-563ML_	51.88 @ 9.6 MHz	33	44.8	56	0.198	500	1.35
MSD1260T-683ML_	55.74 @ 8.6 MHz	25	54.4	68	0.216	500	1.29
MSD1260T-823ML_	70.75 @ 8.2 MHz	26	65.6	82	0.274	500	1.15
MSD1260T-104ML_	80.40 @ 7.3 MHz	17	80.0	100	0.322	500	1.06
MSD1260T-124KL_	87.96 @ 6.2 MHz	27	108	120	0.418	500	0.93
MSD1260T-154KL_	97.64 @ 5.4 MHz	45	135	150	0.476	500	0.87
MSD1260T-184KL_	124.3 @ 5.2 MHz	23	162	180	0.536	500	0.82
MSD1260T-224KL_	143.4 @ 4.3 MHz	25	198	220	0.691	500	0.72
MSD1260T-274KL_	134.8 @ 4.3 MHz	11	243	270	0.806	500	0.67
MSD1260T-334KL_	132.1 @ 3.6 MHz	35	297	330	1.09	500	0.57
MSD1260T-394KL_	131.0 @ 3.4 MHz	14	351	390	1.20	500	0.55
MSD1260T-474KL_	193.5 @ 3.3 MHz	21	423	470	1.59	500	0.48
MSD1260T-564KL_	175.2 @ 2.7 MHz	15	504	560	1.81	500	0.45
MSD1260T-684KL_	158.6 @ 2.7 MHz	11	612	680	2.06	500	0.42
MSD1260T-824KL_	225.9 @ 2.2 MHz	9.2	738	820	2.65	500	0.37
MSD1260T-105KL_	197.0 @ 2.3 MHz	15	900	1000	3.06	500	0.34

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

MSD1260T-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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).

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 D.

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.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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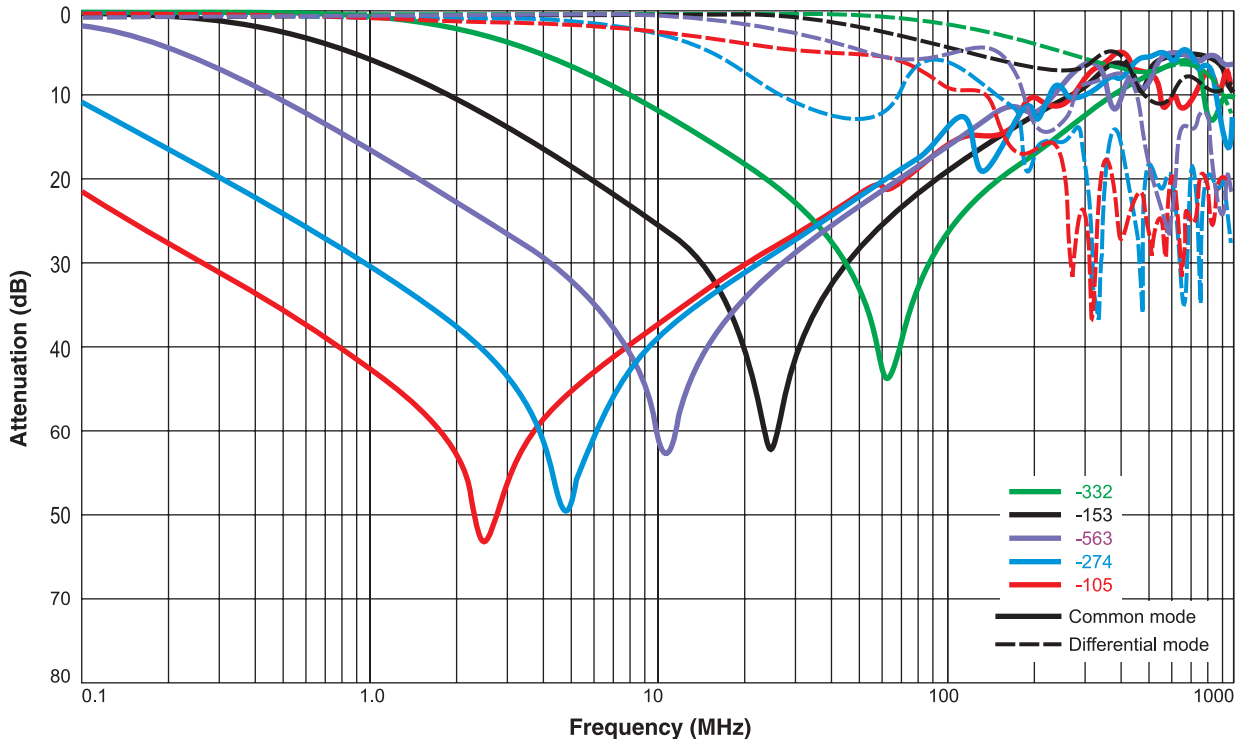
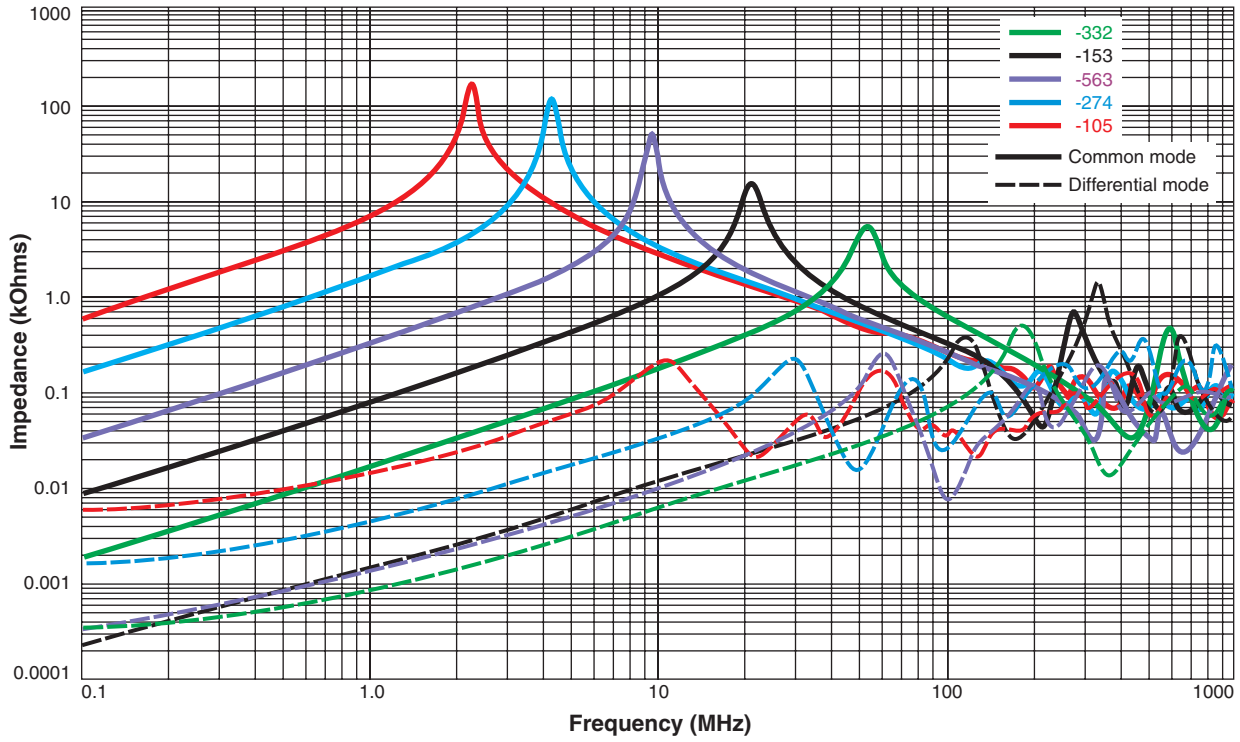
Common Mode Chokes – MSD1260T Series

Typical Attenuation (Ref: 50 Ohms)



Typical Impedance vs Frequency



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