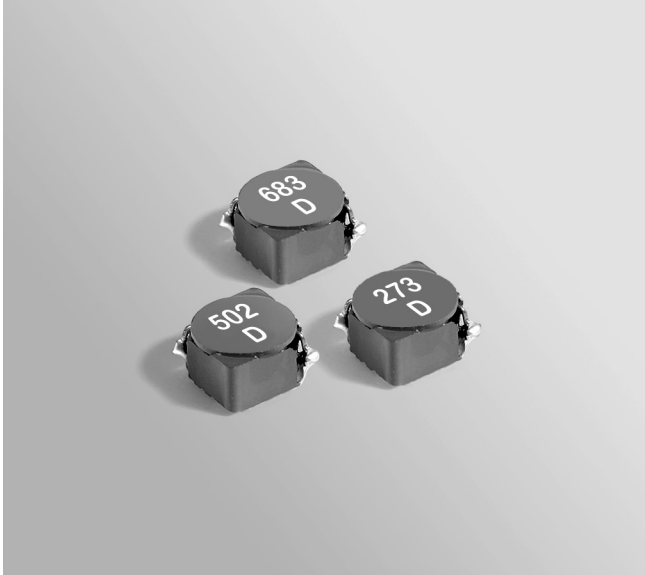


Shielded Power Inductors – MSS7341



- 6.6 × 6.6 mm footprint; 4.1 mm high shielded inductors
- Low DCR and excellent current handling

Designer's Kit C385 contains 3 each of all values.

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Terminations RoHS compliant matte tin over nickel over phos bronze (current production) or gold over nickel over phos bronze (prior production). Other terminations available at additional cost.

Weight: 0.61 – 0.67 g

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

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

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

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

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 300/7 reel; 1200/13" reel; Plastic tape: 16 mm wide, 0.35 mm thick, 12 mm pocket spacing, 4.5 mm pocket depth

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

Part number ¹	Inductance ² (μH)	Percent tolerance ³	DCR (Ohms)		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
			typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
MSS7341-332_L	3.3	30 ,20	0.014	0.018	85	2.74	3.28	3.72	3.95	5.00
MSS7341-502_L	5.0	30 ,20	0.018	0.023	49	2.30	2.82	3.16	3.40	4.70
MSS7341-622_L	6.2	30 ,20	0.024	0.027	42	2.18	2.66	2.98	3.05	4.30
MSS7341-742_L	7.4	30 ,20	0.027	0.031	35	1.92	2.32	2.56	2.80	4.10
MSS7341-872_L	8.7	30 ,20	0.029	0.034	33	1.78	2.12	2.36	2.80	3.90
MSS7341-103ML	10	20	0.032	0.038	32	1.64	1.92	2.10	2.80	3.80
MSS7341-123ML	12	20	0.040	0.050	27	1.48	1.76	1.92	2.45	3.30
MSS7341-153ML	15	20	0.047	0.055	26	1.36	1.60	1.78	2.05	3.00
MSS7341-183ML	18	20	0.065	0.075	25	1.20	1.46	1.62	1.85	2.65
MSS7341-223ML	22	20	0.074	0.082	22	1.02	1.26	1.42	1.70	2.35
MSS7341-273ML	27	20	0.091	0.109	19	1.00	1.14	1.22	1.50	2.10
MSS7341-333ML	33	20	0.104	0.124	17	0.91	1.04	1.16	1.50	1.95
MSS7341-393ML	39	20	0.115	0.130	15	0.85	1.01	1.12	1.50	1.90
MSS7341-473ML	47	20	0.127	0.155	14	0.74	0.92	1.00	1.50	1.85
MSS7341-563ML	56	20	0.174	0.202	11	0.68	0.80	0.87	1.25	1.60
MSS7341-683ML	68	20	0.236	0.250	9.6	0.62	0.73	0.80	1.00	1.35
MSS7341-823ML	82	20	0.257	0.290	8.5	0.57	0.66	0.72	1.00	1.25
MSS7341-104ML	100	20	0.286	0.310	7.2	0.54	0.64	0.71	0.90	1.15
MSS7341-154ML	150	20	0.438	0.475	6.0	0.45	0.53	0.58	0.86	1.14
MSS7341-224ML	220	20	0.660	0.710	5.0	0.35	0.41	0.47	0.57	0.78
MSS7341-474ML	470	20	1.21	1.45	3.0	0.24	0.28	0.32	0.43	0.57
MSS7341-684KL	680	10	1.85	1.98	2.5	0.22	0.27	0.29	0.42	0.56

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

MSS7341-872NLD

Tolerance: M = 20%, N = 30% (Table shows stock tolerances in bold.)

Termination: L = RoHS compliant matte tin over nickel over phos bronze
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) over gold over nickel over phos bronze or S = non-RoHS tin-lead (63/37) over gold over nickel over phos bronze.

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (1200 parts per full reel).

C = 7" machine-ready reel. EIA-481 embossed plastic tape. Special order (300 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. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4263B LCR meter.

3. Tolerances in bold are stocked for immediate shipment.

4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.

5. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information](#).

6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#).

7. Electrical specifications at 25°C.

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



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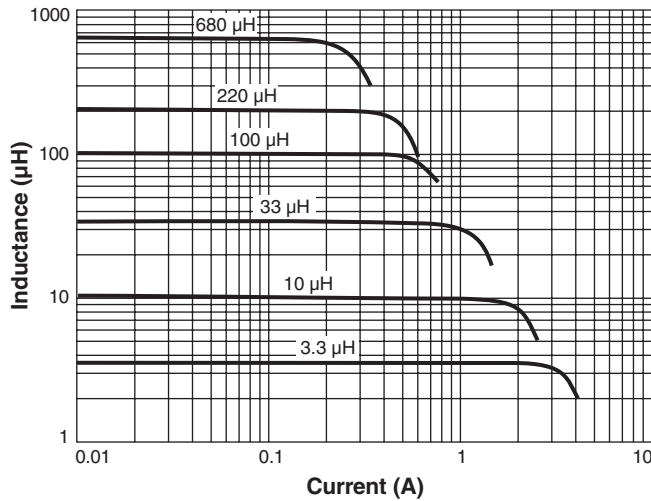
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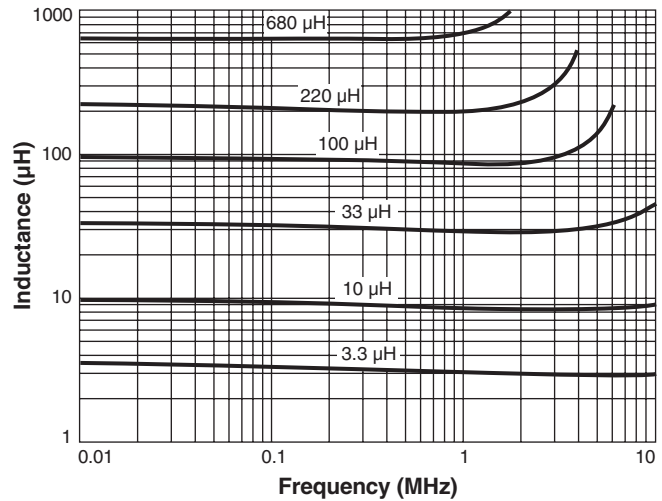


Shielded Power Inductors – MSS7341

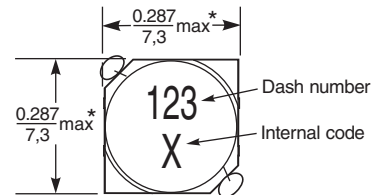
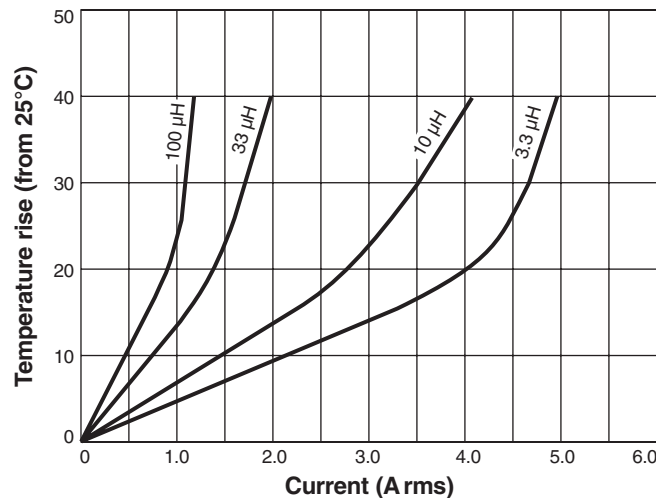
Typical L vs Current



Typical L vs Frequency

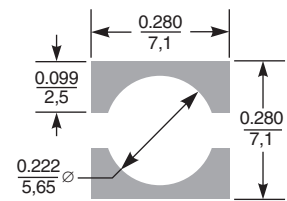
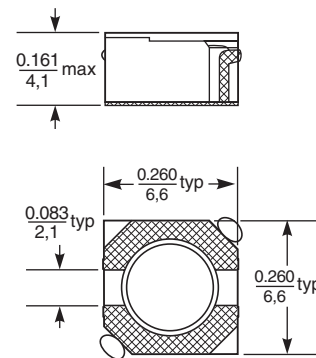


Typical Temperature Rise vs Current



Parts manufactured prior to Sept. 2007 were marked with only the dash number.

*Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.02 in / 0,51 mm.



Recommended Land Pattern

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



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