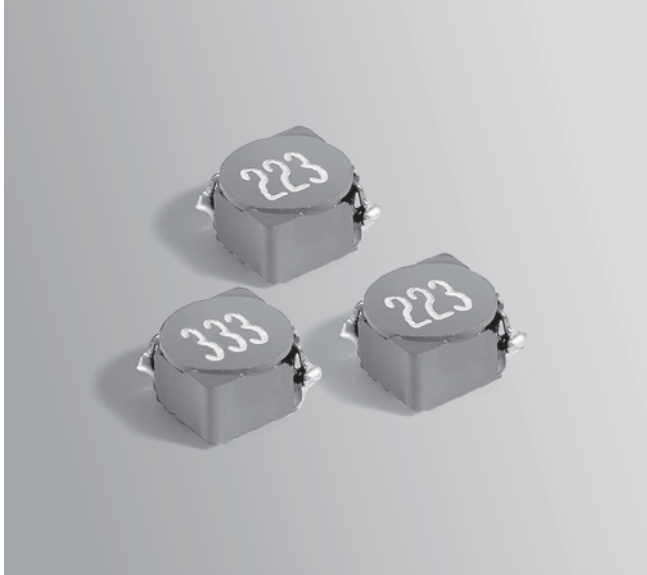


**NEW!**

# SMT Power Inductors - MSS7341 Series



- High efficiency, high current in a rugged, low cost part
- Magnetic shielding allows high density mounting
- 18 inductance values from 3.3 to 100  $\mu\text{H}$

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

**Core material** Ferrite

**Terminations** RoHS compliant gold over nickel over phos bronze. Other terminations available at additional cost.

**Weight:** 0.61 – 0.67 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with  $I_{\text{rms}}$  current,  $+85^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with derated current

**Storage temperature** Component:  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .  
Packaging:  $-55^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**Mean Time Between Failures (MTBF)** 26,315,789 hours

**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** Only pure water or alcohol recommended

Part number <sup>1</sup>	L <sup>2</sup> ( $\mu\text{H}$ )	DCR max (Ohms)	SRF <sup>3</sup> typ (MHz)	Isat <sup>4</sup> (A)	I <sub>rms</sub> (A) <sup>5</sup>	
					20° rise	40° rise
MSS7341-332NL_	3.3 $\pm$ 30%	0.020	58.0	3.5	3.95	5.00
MSS7341-502NL_	5.0 $\pm$ 30%	0.024	46.0	2.9	3.40	4.70
MSS7341-622NL_	6.2 $\pm$ 30%	0.027	42.0	2.5	3.05	4.30
MSS7341-742NL_	7.4 $\pm$ 30%	0.031	40.0	2.3	2.80	4.10
MSS7341-872NL_	8.7 $\pm$ 30%	0.034	35.0	2.2	2.80	3.90
MSS7341-103ML_	10 $\pm$ 20%	0.038	32.0	2.0	2.80	3.80
MSS7341-123ML_	12 $\pm$ 20%	0.053	26.2	1.7	2.45	3.30
MSS7341-153ML_	15 $\pm$ 20%	0.057	22.5	1.6	2.05	3.00
MSS7341-183ML_	18 $\pm$ 20%	0.078	24.0	1.5	1.85	2.65
MSS7341-223ML_	22 $\pm$ 20%	0.082	21.5	1.3	1.70	2.35
MSS7341-273ML_	27 $\pm$ 20%	0.109	19.0	1.2	1.50	2.10
MSS7341-333ML_	33 $\pm$ 20%	0.124	18.0	1.1	1.50	1.95
MSS7341-393ML_	39 $\pm$ 20%	0.138	17.0	1.0	1.50	1.90
MSS7341-473ML_	47 $\pm$ 20%	0.155	14.2	0.95	1.50	1.85
MSS7341-563ML_	56 $\pm$ 20%	0.202	13.4	0.85	1.25	1.60
MSS7341-683ML_	68 $\pm$ 20%	0.276	12.0	0.75	1.00	1.35
MSS7341-823ML_	82 $\pm$ 20%	0.324	11.0	0.70	1.00	1.25
MSS7341-104ML_	100 $\pm$ 20%	0.358	10.5	0.65	0.90	1.15

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

MSS7341-104ML **D**

**Termination:** **L** = RoHS compliant gold 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 (1200 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 V<sub>rms</sub>, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4284A impedance analyzer.

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

4. DC current at which the inductance drops 25% (typ) from its value without current.

5. Current that causes the specified temperature rise from 25°C ambient.

6. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

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

**SPICE models** ON OUR WEB SITE OR CD

## Coilcraft®

Specifications subject to change without notice.  
Please check our website for latest information.

Document 383-1 Revised 04/26/07

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

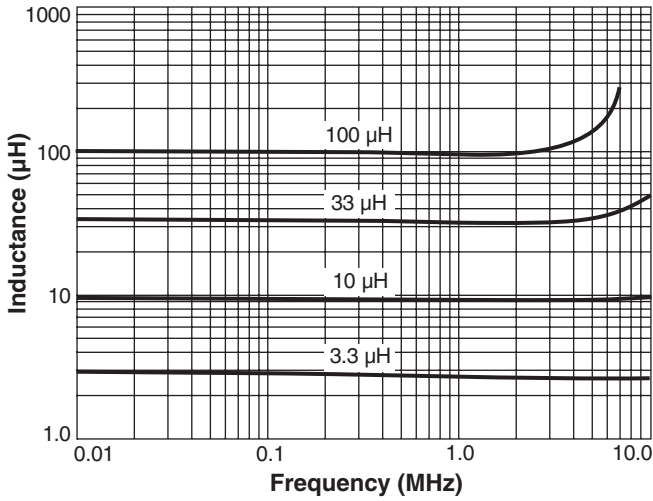
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

**NEW!**

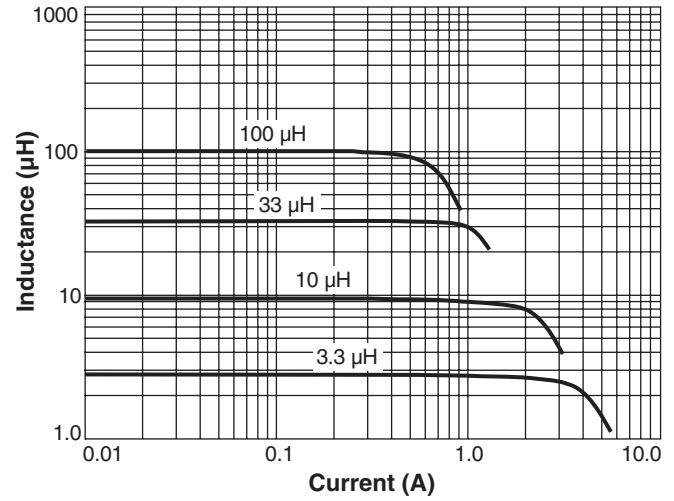


# SMT Power Inductors – MSS7341 Series

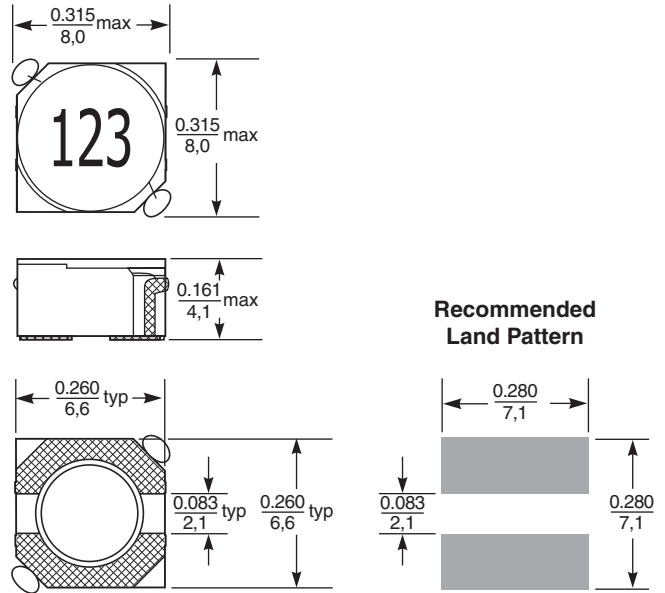
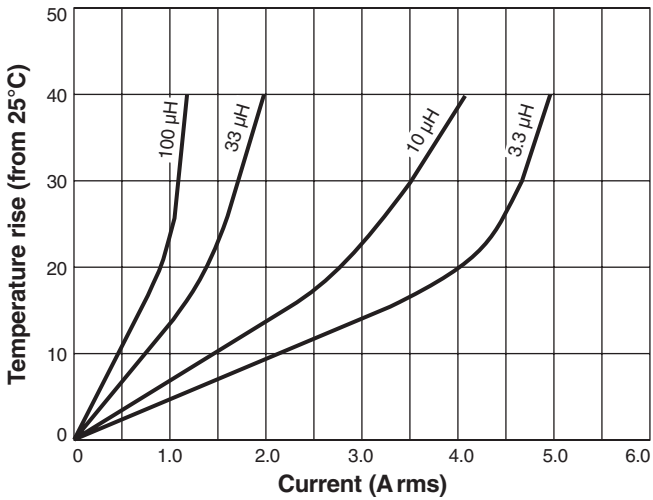
Typical L vs Frequency



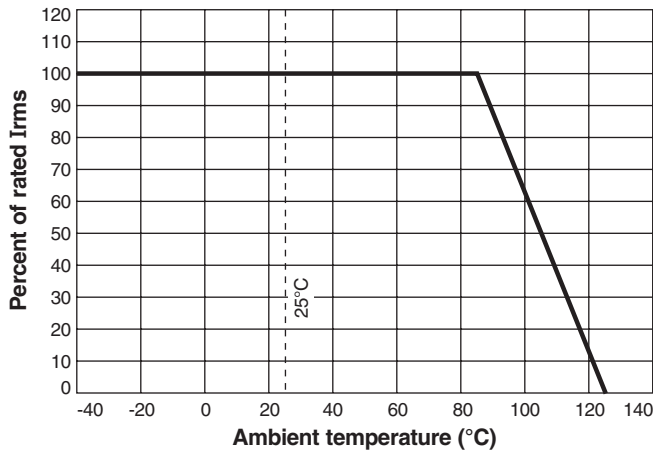
Typical L vs Current



Temperature Rise vs Current



Irms Derating



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Please check our website for latest information.

Document 383-2 Revised 04/26/07

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>