



# Chip Inductors – 0402ME Series (1005)

The 0402ME chip inductors offer outstanding SRF and excellent Q values at higher frequencies. They feature very low DC resistance and higher current ratings than other 0402-size inductors.

Designed to be comparable with other industry standards, they are available in 21 inductance values from 1.5 nH to 56 nH, most at 2% tolerance.

These inductors are ideal for use in high-frequency telecommunications equipment and in resonance circuits such as voltage-controlled oscillators (VCO). Their excellent current handling makes them perfect for power-amplifier applications.

Contact Coilcraft to request free evaluation samples.

Part number <sup>1</sup>	Inductance <sup>2</sup> (nH)	Percent tolerance <sup>3</sup>	Q <sup>4</sup> nom	Q typ at 300 MHz	Q typ at 800 MHz	Q typ at 1.5 GHz	SRF min <sup>5</sup> (GHz)	DCR max <sup>6</sup> (Ohms)	Irms <sup>7</sup> (mA)
0402ME-1N5XJL_	1.5	<b>5</b>	10	30	55	65	18.0	0.03	1500
0402ME-2N7XJL_	2.7	<b>5</b>	20	40	67	85	15.0	0.05	1200
0402ME-3N9XJL_	3.9	5	25	35	58	82	10.0	0.07	1000
0402ME-4N3XJL_	4.3	<b>5</b>	25	35	58	90	10.0	0.07	1000
0402ME-4N7XJL_	4.7	<b>5</b>	25	40	65	85	8.0	0.07	1000
0402ME-5N1XJL_	5.1	<b>5</b>	25	35	60	78	8.0	0.12	800
0402ME-6N2XGL_	6.2	<b>2</b>	25	40	63	80	8.0	0.09	950
0402ME-6N8XGL_	6.8	<b>2</b>	25	45	70	90	6.0	0.09	950
0402ME-7N5XGL_	7.5	<b>2</b>	25	38	58	75	6.0	0.13	850
0402ME-9N1XGL_	9.1	<b>2</b>	25	40	62	85	5.5	0.14	800
0402ME-10NXGL_	10	<b>2</b>	25	38	60	75	5.5	0.17	750
0402ME-12NXGL_	12	<b>2</b>	30	40	60	80	5.5	0.14	750
0402ME-13NXGL_	13	2	30	35	55	70	5.0	0.21	430
0402ME-15NXGL_	15	<b>2</b>	30	40	60	80	5.0	0.16	700
0402ME-18NXGL_	18	<b>2</b>	25	40	63	80	4.5	0.27	500
0402ME-22NXGL_	22	<b>2</b>	25	35	55	73	4.0	0.30	500
0402ME-27NXGL_	27	<b>2</b>	25	35	55	60	3.5	0.52	400
0402ME-33NXGL_	33	<b>2</b>	25	35	55	60	3.2	0.63	380
0402ME-39NXGL_	39	<b>2</b>	25	35	55	62	3.0	0.70	350
0402ME-47NXGL_	47	<b>2</b>	25	34	52	60	2.9	1.08	270
0402ME-56NXGL_	56	<b>2</b>	25	36	53	50	2.8	1.17	210

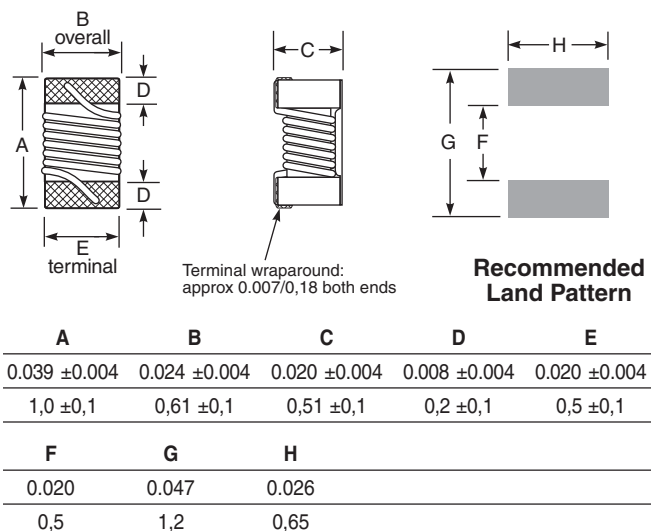
1. When ordering, please specify **packaging** code:

#### 0402ME-56NXJLW

**Packaging:** W = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel).

U = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter W instead.

- Inductance measured at 100 MHz, 0.1 Vrms, 0 Adc using Coilcraft SMD-F fixture in Agilent/HP 4284A impedance analyzer with Coilcraft-provided correlation pieces.
- Tolerances in bold are stocked for immediate shipment.
- Q measured using Agilent/HP4291A with Agilent/HP 16193 test fixture.
- SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
- DCR measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF858 test fixture.
- Current that causes a 20°C rise from 25°C ambient.
- Operating temperature range –40°C to +125°C.
- Electrical specifications at 25°C.



**Terminations:** Silver-palladium-platinum-glass frit

**Tape and reel:** 2000/7" reel 8 mm tape width

For packaging data see Tape and Reel Specifications section.

# Coilcraft®

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

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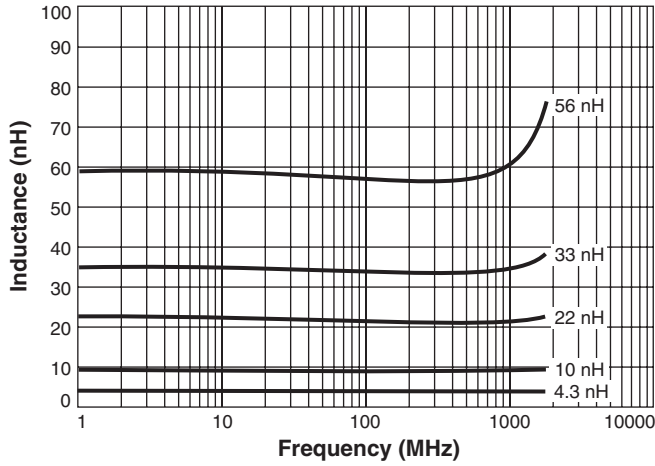
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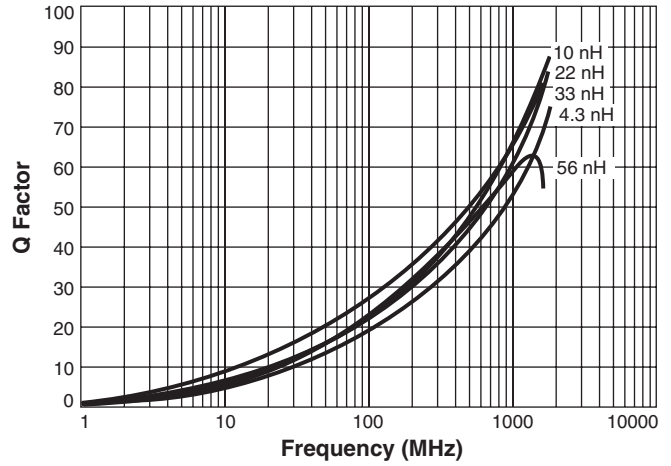


# 0402ME Series (1005)

## Typical L vs Frequency



## Typical Q vs Frequency



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