NEW!

Ceramic Chip Inductors 016008C Series (0402)

RoHS/ REACH COMPLIANT

Halogen Free

- World's smallest high-frequency-wirewound chip inductor
- First performance-optimized 01005 size (metric 0402, 0.4 x 0.2 mm)
- Extremely high Q, the highest in the market – higher than all thin film type
- Exceptionally low DCR – lower than all thin film type
- 36 inductance values from 0.45 nH to 24 nH

Part number[1]	L[2] (nH)	Percent tolerance	Q typ[3] 900 MHz	Q typ[3] 1.7 GHz	Q typ[3] 2.4 GHz	SRF typ[4] (GHz)	DCR max[5] (mOhms)	Irms (mA) at 25°C[6]	Irms (mA) at 85°C[7]	Irms (mA) at 125°C[8]
016008C-N45XKRW	0.45	**10**	37	48	59	36.0	60	550	240	140
016008C-N50XKRW	0.5	**10**	30	40	48	36.0	75	445	170	90
016008C-1N1XKRW	1.1	**10**	38	50	62	21.0	95	415	240	140
016008C-1N2XKRW	1.2	**10**	34	45	56	21.3	130	335	170	90
016008C-1N3XKRW	1.3	**10**	27	37	46	21.0	200	270	120	50
016008C-2N0XJRW	2.0	**5**	34	45	55	15.2	125	345	240	140
016008C-2N2XJRW	2.2	**5**	33	45	54	14.8	180	275	170	90
016008C-2N3XJRW	2.3	**5**	25	36	46	14.8	160	340	190	100
016008C-2N4XJRW	2.4	**5**	27	36	43	14.2	260	225	120	50
016008C-2N5XJRW	2.5	**5**	25	35	44	13.6	205	305	170	90
016008C-3N3XJRW	3.3	**5**	34	45	52	12.2	150	305	240	140
016008C-3N6XJRW	3.6	**5**	31	42	48	12.0	230	245	170	90
016008C-3N8XJRW	3.8	**5**	27	36	42	11.4	345	195	120	50
016008C-3N9XJRW	3.9	**5**	27	37	42	11.3	230	275	190	100
016008C-4N3XJRW	4.3	**5**	32	42	48	10.8	190	265	240	140
016008C-4N7XJRW	4.7	**5**	34	47	57	11.0	275	220	170	90
016008C-5N1XJRW	5.1	**5**	31	42	50	10.0	325	200	140	70
016008C-5N3XJRW	5.3	**5**	29	40	47	9.7	430	175	120	50
016008C-5N6XJRW	5.6	**5**	28	39	47	9.8	275	220	190	100
016008C-5N8XJRW	5.8	**5**	35	48	58	9.8	315	220	190	100
016008C-6N0XJRW	6.0	**5**	31	42	51	9.8	340	200	170	90
016008C-6N2XJRW	6.2	**5**	33	44	53	9.7	385	185	140	70
016008C-6N8XJRW	6.8	**5**	31	42	48	9.0	310	200	190	100
016008C-6N9XJRW	6.9	**5**	30	40	46	8.8	510	160	120	50
016008C-7N5XJRW	7.5	**5**	28	37	43	8.2	320	260	190	100
016008C-7N8XJRW	7.8	**5**	31	42	49	8.4	380	180	170	90
016008C-8N2XJRW	8.2	**5**	30	40	46	8.1	445	170	140	70
016008C-8N8XJRW	8.8	**5**	30	39	44	7.8	600	145	120	50
016008C-9N5XJRW	9.5	**5**	28	37	44	7.6	575	180	140	70
016008C-10NXJRW	10	**5**	31	40	46	7.4	520	155	140	70
016008C-12NXJRW	12	**5**	27	37	42	6.5	640	170	140	70
016008C-13NXJRW	13	**5**	30	38	43	6.5	730	130	120	50
016008C-15NXJRW	15	**5**	27	35	38	6.2	820	120	120	50
016008C-18NXJRW	18	**5**	27	37	42	5.5	1020	120	100	40
016008C-20NXJRW	20	**5**	28	35	37	5.3	1300	110	90	40
016008C-24NXJRW	24	**5**	28	33	33	4.8	1550	100	90	40

1. **Packaging: W** = 7″ machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel).
2. Inductance measured at 250 MHz using a Coilcraft ccf1426 fixture in an Agilent/HP 4287 impedance analyzer with Coilcraft-provided correlation pieces.
3. Q measured using an Agilent/HP 4991 with an Coilcraft CCF1481 test fixture.
4. SRF measured using Agilent/HP 8722ES network analyzer and Coilcraft CCF1406 test fixture.
5. DCR measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF858 test fixture.
6. Current that causes a 40°C temperature rise at 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
7. Maximum current that can be applied at 85°C.
8. Maximum current that can be applied at 125°C.
9. Electrical specifications at 25°C.

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

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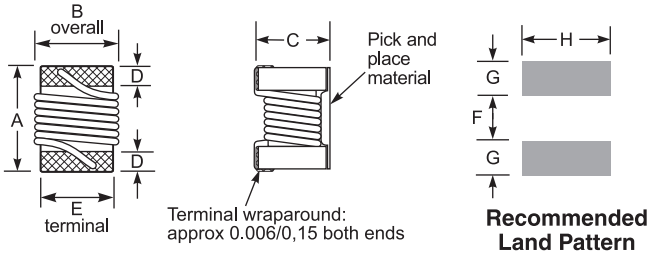
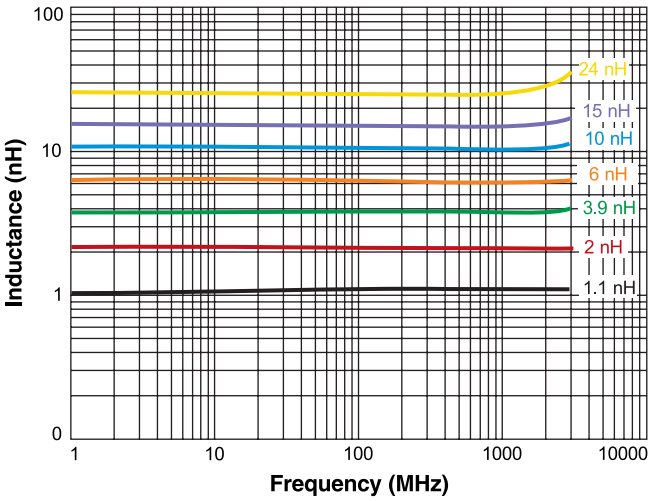
Chip Inductors – 016008C Series



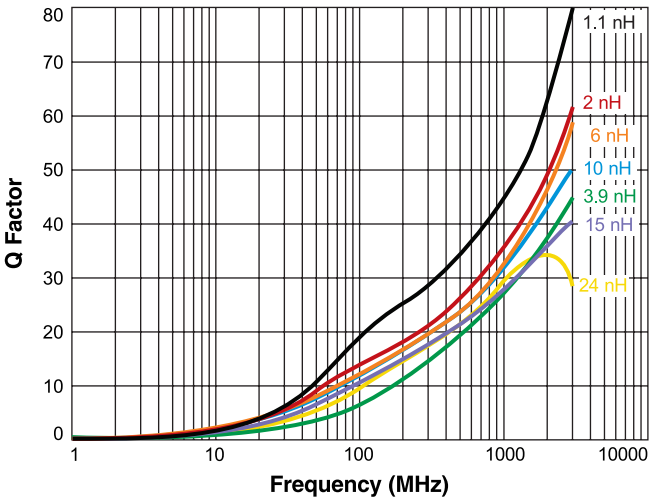
Amax	Bmax	Cmax	Dref	Eref	Fref	Gref	Href	
0.0185	0.0110	0.0138	0.0035	0.0080	0.0060	0.0090	0.0120	inches
0,47	0,28	0,35	0,09	0,20	0,15	0,23	0,30	mm

Core material Ceramic
Environmental RoHS compliant, halogen free
Terminations Matte tin over copper over nickel over molybdenum - manganese
Weight 0.10 – 0.16 mg
Ambient temperature –40°C to +125°C with Irms current
Maximum part temperature +140°C (ambient + temp rise)
Storage temperature Component: –40°C to +140°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
Temperature Coefficient of Inductance (TCL) +25 to +150 ppm/°C
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
Packaging 2000 per 7″ reel. Paper tape: 8 mm wide, 0.42 mm thick, 2 mm pocket spacing
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Typical L vs Frequency



Typical Q vs Frequency



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