DESCRIPTION

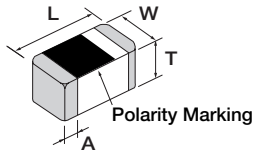
The LLV0603-FH Series is a multilayer ceramic chip inductor with high-Q characteristics in an EIA standard 0201 footprint (0.6mm x 0.3mm) and a low profile of only 0.33mm maximum. Manufactured with a proprietary ceramic material and process, these lead-free chip inductors are ideal for use in RF modules and embedded subassemblies where space is limited and printed stripline inductors are impractical.

FEATURES

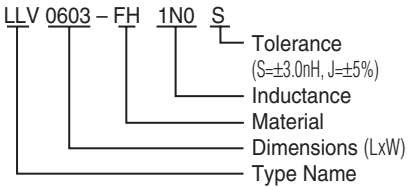
- Inductance range: 1.0-47nH
- Miniature size: 0201 footprint (0.6mm x 0.3mm)
- Q: 21 ~ 32 typical (at 1800MHz)
- Temperature coefficient of inductance: +250ppm/°C
- Temperature range: –55°C to +125°C
- S-parameter data available upon request
- Packaged on tape and reel in 15,000 piece quantity
- Reflow solderable
- Lead-free terminations

DIMENSIONS

Length L (mm)	Width W (mm)	Thickness T (mm)	Electrode width A (mm)
0.6±0.03	0.3±0.03	0.3±0.03	0.1~0.2



PART NUMBERING



ELECTRICAL SPECIFICATIONS

TYPE LLV0603-FH

TOKO Part Number	Inductance & Tolerance at 100MHz		Q min.	Q (typ.)							SRF (MHz) min.	RDC (Ω) max.	IDC (mA) max.
	Lo (nH)	L Tol.*	100 MHz	100 MHz	300 MHz	500 MHz	800 MHz	1 GHz	1.8 GHz	2.4 GHz			
LLV0603-FH1N0S	1.0	S	4	6	11	14	19	22	31	38	13000	0.14	300
LLV0603-FH1N2S	1.2	S	4	6	11	14	19	22	31	38	13000	0.14	300
LLV0603-FH1N5S	1.5	S	4	6	11	14	19	21	30	37	11000	0.16	300
LLV0603-FH1N8S	1.8	S	4.5	6	11	15	19	22	31	37	8500	0.18	300
LLV0603-FH2N2S	2.2	S	5	6	11	15	19	22	31	36	8500	0.20	250
LLV0603-FH2N7S	2.7	S	5	7	12	15	20	23	32	38	6000	0.23	250
LLV0603-FH3N3S	3.3	S	5	7	12	16	20	23	32	38	5000	0.25	250
LLV0603-FH3N9S	3.9	S	5	7	12	16	20	23	32	38	5000	0.28	250
LLV0603-FH4N7S	4.7	S	5.5	7	12	16	20	23	32	36	4000	0.30	250
LLV0603-FH5N6S	5.6	S	6	7	12	16	20	22	31	34	4000	0.35	220
LLV0603-FH6N8J	6.8	J	6	7	12	16	20	22	30	33	3500	0.40	220
LLV0603-FH8N2J	8.2	J	6	8	12	16	20	22	29	30	3000	0.50	220
LLV0603-FH10NJ	10	J	6	8	12	16	20	23	28	27	2500	0.60	220
LLV0603-FH12NJ	12	J	6	8	13	17	21	23	27	25	2500	0.65	180
LLV0603-FH15NJ	15	J	6	8	13	16	20	22	24	18	2000	0.75	180
LLV0603-FH18NJ	18	J	6.5	8	13	16	19	21	21	13	2000	0.85	150
LLV0603-FH22NJ	22	J	7	8	14	17	20	22	22	—	2000	1.70	100
LLV0603-FH27NJ	27	J	7	8	14	17	20	21	—	—	1700	1.80	50
LLV0603-FH33NJ	33	J	7	8	14	17	19	20	—	—	1400	2.00	50
LLV0603-FH39NJ	39	J	6	7	12	14	15	14	—	—	1300	2.30	50
LLV0603-FH47NJ	47	J	6	7	12	14	13	11	—	—	1100	2.70	50

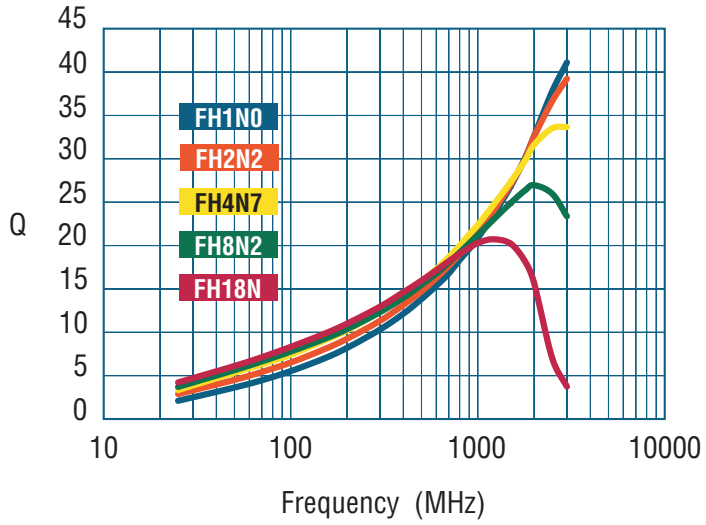
* Part number tolerance: S=±0.3nH, J = ±5%

Testing Conditions: (1) L,Q: Agilent 4291A/B (Test fixture Agilent 16196C) (2) SRF: Agilent 8719D, 8720D (3) RDC: Agilent 4338A/B

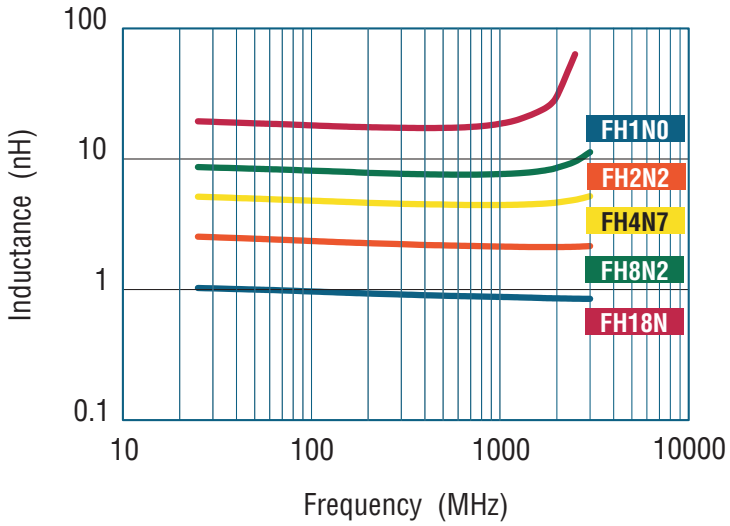
CF-310-LLV0603FH
R-LOG0306A

TYPICAL CHARACTERISTICS

Q vs Frequency



Inductance vs Frequency



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