MULTILAYER CHIP INDUCTORS

Nano-henry type for cellular and cordless phone
MLR series

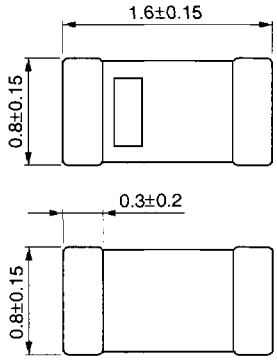
FEATURES

- High self-resonant frequency.
- Multilayer monolithic construction yields high reliability.

APPLICATIONS

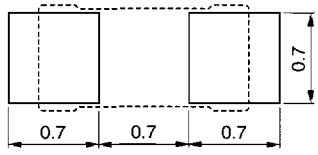
For high frequency applications including cellular phones, pagers and computer communications.

SHAPES AND DIMENSIONS



Weight: 4mg

RECOMMENDED PC BOARD PATTERNS



Dimensions in mm

ELECTRICAL CHARACTERISTICS

Inductance (nH)	Inductance tolerance	Q min.	Q typ.				Self-resonant frequency (MHz)		DC resistance (Ω)		Rated current (mA)	Part No.
		100MHz	100MHz	300MHz	500MHz	1000MHz	min.	typ.	max.	typ.	max.	
2.2	±0.3nH	8	20	37	46	78	3000	>10GHz	0.2	0.03	500	MLR1608M2N2S
2.7	±0.3nH	8	14	28	37	56	3000	>10GHz	0.2	0.06	500	MLR1608M2N7S
3.3	±0.3nH	8	12	25	32	46	3000	4500	0.2	0.07	500	MLR1608M3N3S
3.9	±0.3nH	8	12	21	26	36	3000	4500	0.2	0.09	500	MLR1608M3N9S
4.7	±0.3nH	8	12	21	26	36	3000	4400	0.2	0.12	500	MLR1608M4N7S
5.6	±0.5nH	8	12	20	25	36	2500	3200	0.3	0.13	500	MLR1608M5N6D
6.8	±0.5nH	8	12	20	25	35	2500	3100	0.3	0.15	500	MLR1608M6N8D
8.2	±0.5nH	8	12	20	24	35	2500	3000	0.3	0.17	500	MLR1608M8N2D
10	±10, ±5%	8	12	19	24	28	2200	2700	0.5	0.23	300	MLR1608M10N□*
12	±10, ±5%	8	12	19	24	28	2000	2600	0.5	0.27	300	MLR1608M12N□
15	±10, ±5%	8	12	17	22	24	1800	2300	0.6	0.3	300	MLR1608M15N□
18	±10, ±5%	8	12	17	20	23	1700	2300	0.6	0.33	300	MLR1608M18N□
22	±10, ±5%	8	12	19	22	21	1500	2000	0.6	0.39	300	MLR1608M22N□
27	±10, ±5%	8	12	19	23	20	1300	1700	0.8	0.4	300	MLR1608M27N□
33	±10, ±5%	8	12	22	24	14	1100	1500	0.8	0.49	300	MLR1608M33N□
39	±10, ±5%	8	12	23	26	13	1000	1350	0.8	0.54	300	MLR1608M39N□
47	±10, ±5%	8	12	21	20	—	800	1000	1	0.58	200	MLR1608M47N□
56	±10, ±5%	8	12	17	15	—	800	950	1	0.6	200	MLR1608M56N□
68	±10, ±5%	8	12	16	13	—	600	850	1	0.65	200	MLR1608M68N□
82	±10, ±5%	8	12	15	11	—	500	700	1	0.7	200	MLR1608M82N□
100	±10, ±5%	8	12	15	10	—	500	650	1	0.75	200	MLR1608MR10□

*□: Nominal resistance tolerance J: ±5%, K: ±10%

- Test equipment
  Inductance Q: HP4291A+16192A SRF: HP8720C Rdc: YOKOGAWA TYPE7561
- Rated current
  Value obtained when current flows and temperature has risen to 20°C.

TDK CORPORATION

⚠ Specifications which provide more details for the proper and safe use of the described product are available upon request.

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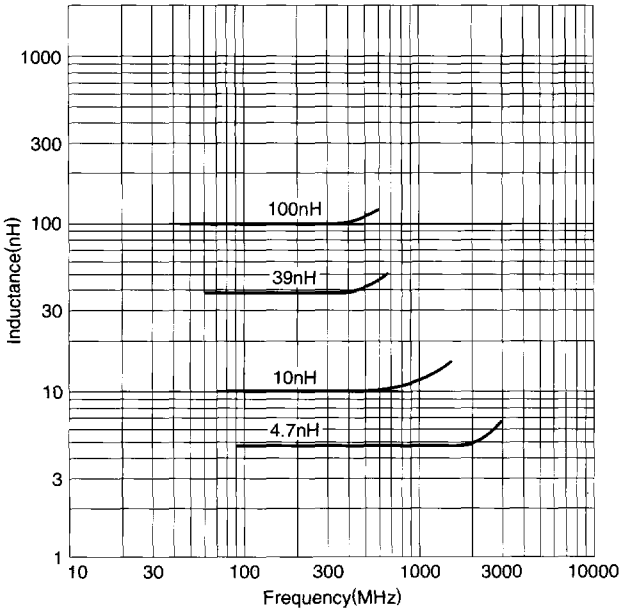
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS