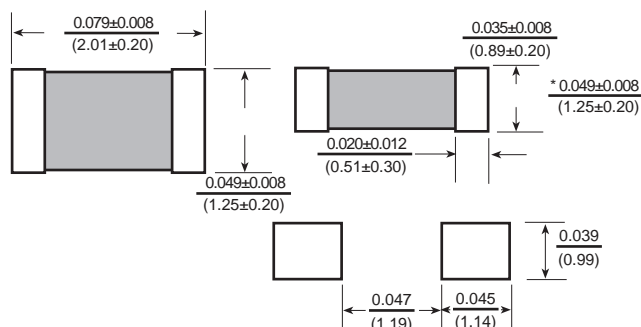


# MLC10 Multilayer Chip Inductors



## Electrical

### Q vs. Frequency Characteristics:

Measured on Impedance Analyzer HPA4195A.

### Inductance vs. Temperature

**Characteristics:** Measured on LCR Meter HP4285A.

### Impedance vs. Frequency

**Characteristics:** Measured on Impedance Analyzer HPA4195A.

### Inductance Vs. DC Current

**Characteristics:** Measured on LCR Meter HPA4285A.

**Tolerance:** For 20% use M, 10% use K, and 5% use J as part number suffix.

## Mechanical

**Solderability:** 90% terminal coverage.

Preheat: 120 ± 20°C for 60 sec. Solder: H63A. Solder Temp.: 230 ± 5°C. Flux: rosin. Dip time: 4 ± 1 sec.

## Environmental

**Thermal Shock:** Inductance shall be within ±5% of initial value. Q shall be within ±30% of initial value within temp. range of -40°C to +85°C for 30 min. each for > 100 cycles.

**Humidity Resistance:** Same results as above. Temp. 4°C. Humidity: 95% RH. Time: 1000 hrs.

**High Temp Resistance:** Same results as above. Temp: 85°C. Time: 1000 hrs.

**Low Temp Resistance:** Same results as above. Temp: -45°C. Time: 1000 hrs.

**Operating Temp.:** -25°C to +85°C.

**Storage Temp.:** -40°C to +85°C.

## Physical

**Packaging:** .022μH - 2.2μH,  
4000 pieces per reel.  
2.7μH - 27μH  
3000 pieces per 7 inch reel.

Allied Part Number	Inductance (μh)	Tolerance (%)	Q Min.	Test Freq. (MHz)	SRF Min. (MHz)	DCR Max. (Ω)	IDC Max. (mA)
MLC10-R022M-RC	.022	20	20	50	320	0.20	300
MLC10-R033M-RC	.033	20	20	50	320	0.20	300
MLC10-R047M-RC	.047	20	20	50	320	0.20	300
MLC10-R056M-RC	.056	20	20	50	320	0.20	300
MLC10-R068M-RC	.068	20	20	50	280	0.20	300
MLC10-R082M-RC	.082	20	20	50	255	0.20	300
MLC10-R10M-RC	.10	20	25	25	235	0.30	250
MLC10-R12M-RC	.12	20	25	25	220	0.30	250
MLC10-R15M-RC	.15	20	25	25	200	0.40	250
MLC10-R18M-RC	.18	20	25	25	185	0.40	250
MLC10-R22M-RC	.22	20	25	25	170	0.50	250
MLC10-R27M-RC	.27	20	25	25	150	0.50	250
MLC10-R33M-RC	.33	20	25	25	145	0.55	250
MLC10-R39M-RC	.39	20	25	25	135	0.65	250
MLC10-R47M-RC	.47	20	25	25	125	0.65	250
MLC10-R56M-RC	.56	20	25	25	115	0.75	150
MLC10-R68M-RC	.68	20	25	25	105	0.80	150
MLC10-R82M-RC	.82	20	25	25	100	1.00	150
MLC10-1R0K-RC	1.0	10	45	10	75	0.40	50
MLC10-1R2K-RC	1.2	10	45	10	65	0.50	50
MLC10-1R5K-RC	1.5	10	45	10	60	0.50	50
MLC10-1R8K-RC	1.8	10	45	10	55	0.60	50
MLC10-2R2K-RC	2.2	10	45	10	50	0.65	30
MLC10-2R7K-RC *	2.7	10	45	10	45	0.75	30
MLC10-3R3K-RC *	3.3	10	45	10	41	0.80	30
MLC10-3R9K-RC *	3.9	10	45	10	38	0.90	30
MLC10-4R7K-RC *	4.7	10	45	10	35	1.00	30
MLC10-5R6K-RC *	5.6	10	45	4	32	0.90	15
MLC10-6R8K-RC *	6.8	10	45	4	29	1.00	15
MLC10-8R2K-RC *	8.2	10	45	4	26	1.10	15
MLC10-100K-RC *	10	10	45	2	24	1.10	15
MLC10-120K-RC *	12	10	45	2	22	1.20	15
MLC10-150K-RC *	15	10	30	1	19	0.80	5
MLC10-180K-RC *	18	10	30	1	18	0.90	5
MLC10-220K-RC *	22	10	30	1	16	1.10	5
MLC10-270K-RC *	27	10	30	1	13	1.25	5

\*See dimensional difference.  
Available in tighter tolerances.  
All specifications subject to change without notice.