

ML2012 SERIES – Multilayer Chip Inductors

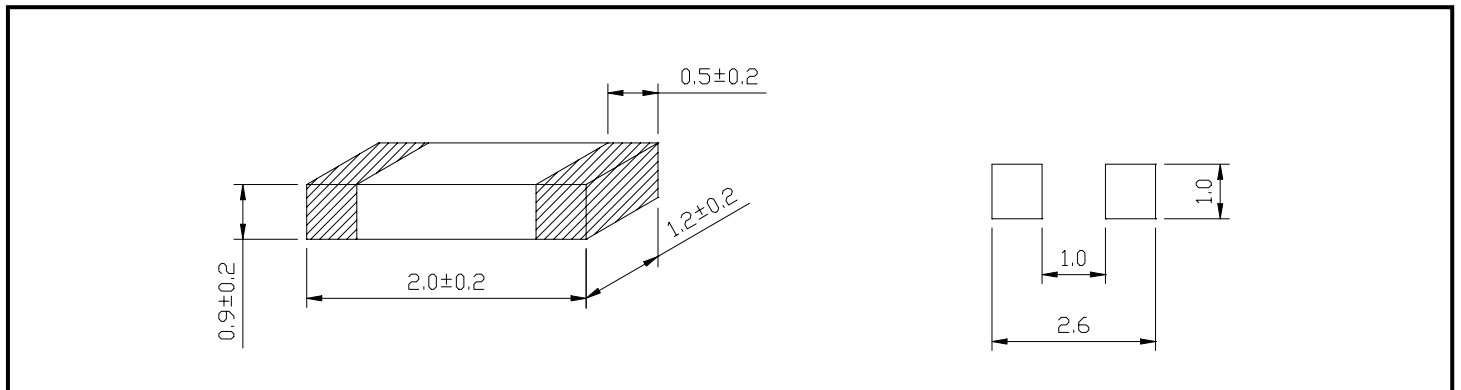


PART NUMBERING SYSTEM

ML	2012	—	1R0K	—	LF
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

UNIT : mm



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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Q. MIN.	L, Q TEST FREQUENCY (MHz)	SRF (MHz) MIN.	DCR (Ω) (max)	IDC(mA) (max)
ML2012-47NM-LF	$0.047 \pm 20\%$	15	50	320	0.20	300
ML2012-68NM-LF	$0.068 \pm 20\%$	15	50	280	0.20	300
ML2012-82NM-LF	$0.082 \pm 20\%$	15	50	255	0.20	300
ML2012-R10K-LF	$0.10 \pm 10\%$	20	25	235	0.30	250
ML2012-R12K-LF	$0.12 \pm 10\%$	20	25	220	0.30	250
ML2012-R15K-LF	$0.15 \pm 10\%$	20	25	200	0.40	250
ML2012-R18K-LF	$0.18 \pm 10\%$	20	25	185	0.40	250
ML2012-R22K-LF	$0.22 \pm 10\%$	20	25	170	0.50	250
ML2012-R27K-LF	$0.27 \pm 10\%$	20	25	150	0.50	250
ML2012-R33K-LF	$0.33 \pm 10\%$	20	25	145	0.55	250
ML2012-R39K-LF	$0.39 \pm 10\%$	25	25	135	0.65	200
ML2012-R47K-LF	$0.47 \pm 10\%$	25	25	125	0.65	200

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RoHS Compliant

SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Q. MIN.	L, Q TEST FREQUENCY (MHz)	SRF (MHz) MIN.	DCR (Ω) (max)	IDC(mA) (max)
ML2012-R56K-LF	0.56 $\pm$ 10%	25	25	115	0.75	150
ML2012-R68K-LF	0.68 $\pm$ 10%	25	25	105	0.80	150
ML2012-R82K-LF	0.82 $\pm$ 10%	25	25	100	1.00	150
ML2012-1R0K-LF	1.0 $\pm$ 10%	45	10	75	0.40	50
ML2012-1R2K-LF	1.2 $\pm$ 10%	45	10	65	0.50	50
ML2012-1R5K-LF	1.5 $\pm$ 10%	45	10	60	0.50	50
ML2012-1R8K-LF	1.8 $\pm$ 10%	45	10	55	0.60	50
ML2012-2R2K-LF	2.2 $\pm$ 10%	45	10	50	0.65	30
ML2012-2R7K-LF	2.7 $\pm$ 10%	45	10	45	0.75	30
ML2012-3R3K-LF	3.3 $\pm$ 10%	45	10	41	0.80	30
ML2012-3R9K-LF	3.9 $\pm$ 10%	45	10	38	0.90	30
ML2012-4R7K-LF	4.7 $\pm$ 10%	45	10	35	1.00	15
ML2012-5R6K-LF	5.6 $\pm$ 10%	50	4	32	0.90	15
ML2012-6R8K-LF	6.8 $\pm$ 10%	50	4	29	1.00	15
ML2012-8R2K-LF	8.2 $\pm$ 10%	50	4	26	1.10	15
ML2012-100K-LF	10 $\pm$ 10%	50	2	24	1.15	15
ML2012-120K-LF	12 $\pm$ 10%	50	2	22	1.25	15
ML2012-150K-LF	15 $\pm$ 10%	30	1	19	0.80	5
ML2012-180K-LF	18 $\pm$ 10%	30	1	18	0.90	5
ML2012-220K-LF	22 $\pm$ 10%	30	1	16	1.10	5
ML2012-270K-LF	27 $\pm$ 10%	30	1	14	1.15	5
ML2012-330K-LF	33 $\pm$ 10%	30	0.4	13	1.25	5

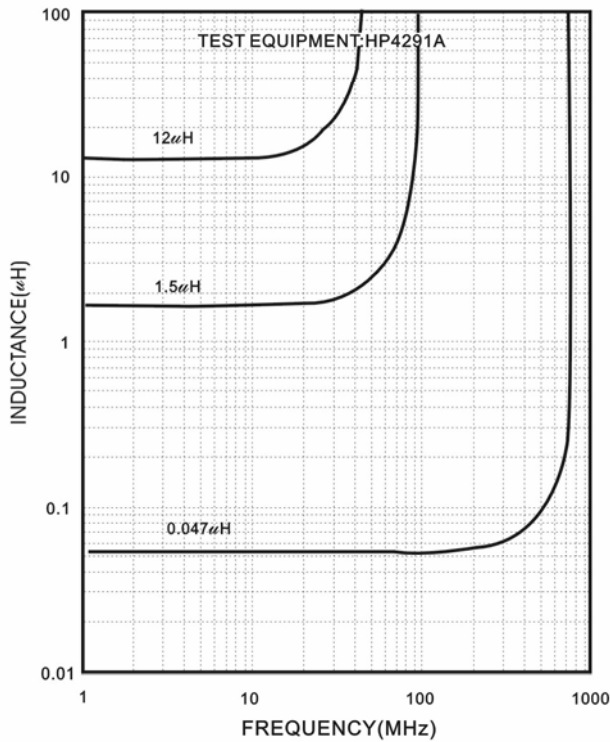
INDUTANCE TOLERANCE : (K= $\pm$ 10%, M= $\pm$ 20%)

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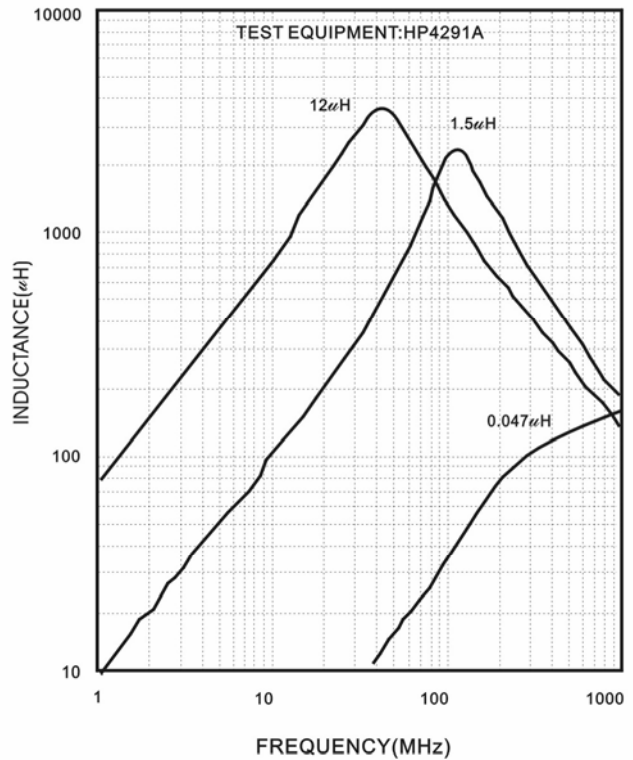


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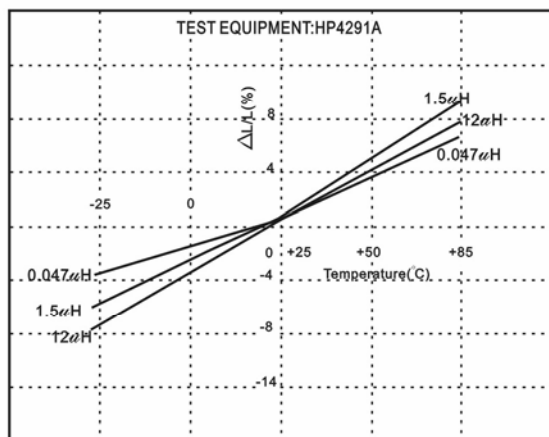
INDUCANCE vs. FREQUENCY
CHARACTERSTICS



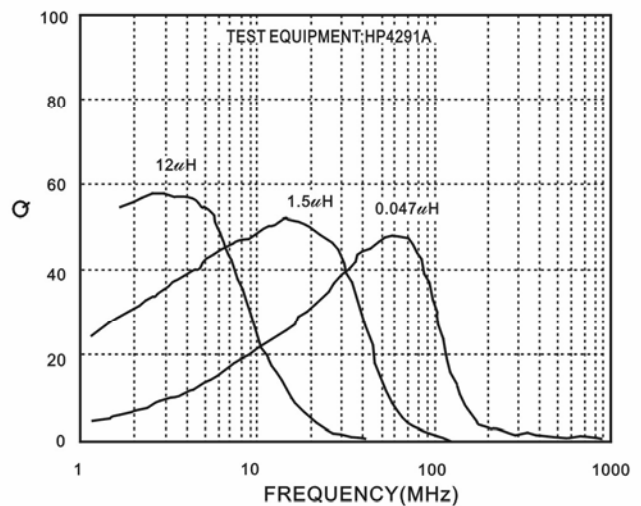
INDUCANCE vs. FREQUENCY
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INDUCANCE vs. FREQUENCY
CHARACTERSTICS



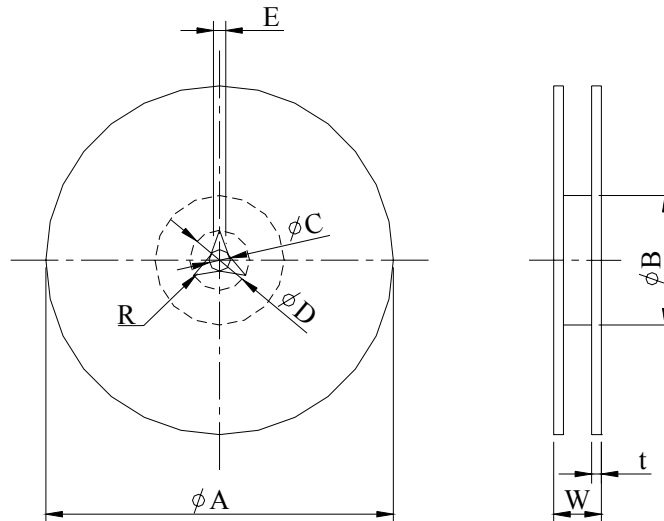
Q vs. FREQUENCY CHARACTERISTICS



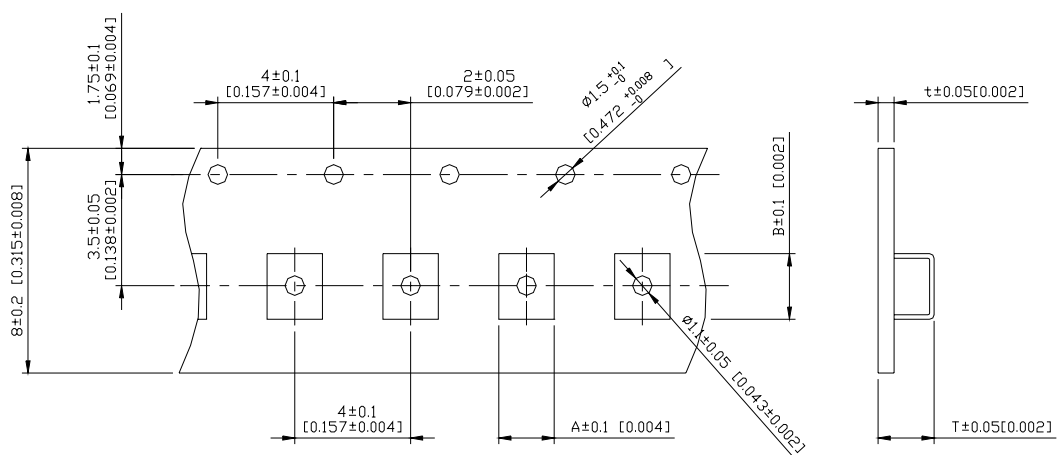
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PACKAGING SPECIFICATION



	A	B	C	D	E	W8	W12	t	R
T($\phi 178\text{mm}$) Reel	$\phi 178\pm 2$	$\phi 60\pm 1$	$\phi 13\pm 0.8$	$\phi 21\pm 0.8$	2	10 ± 1.5	14.5 ± 1.5	1.27 ± 0.2	1
T($\phi 330\text{mm}$) Reel	$\phi 330\pm 2$	$\phi 100\pm 2$	$\phi 13\pm 0.8$	$\phi 21\pm 0.8$	2	10 ± 1.5	14.5 ± 1.5	1.27 ± 0.2	1



TYPE	A	B	T	t	T($\phi 178\text{mm}$)	T($\phi 330\text{mm}$)
ML2012	1.55	2.30	1.20	0.2	4000 pcs/reel	-