

## High Q / High Current Ceramic Chip Inductors - MS1005HP

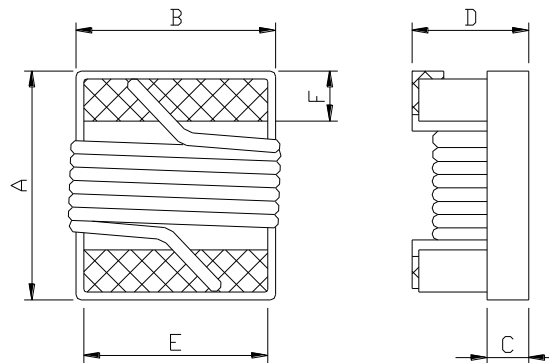
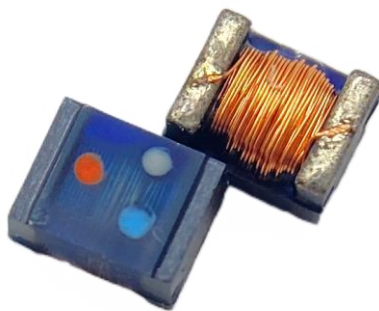


### PART NUMBERING SYSTEM

<b>MS</b>	<b>1005 HP</b>	—	<b>22NJ</b>	—	<b>LF</b>
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

### SHAPES AND DIMENSIONS

UNIT : mm

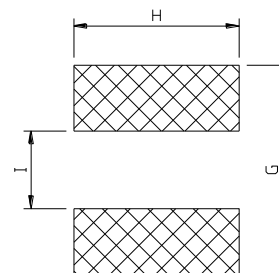


**A=1.1±0.1 B=0.7±0.1 C=0.35 ref. D=0.60 max. E=0.60 ref. F=0.15 ref.**

### RECOMMENDED PATTERNS

UNIT : mm

**G=1.40 H=0.66 I=0.60**



### Features:

- 1> Inductance values from **2.2nH to 68 nH**
- 2> Miniature SMD power chip Inductors.
- 3> **SRF values as high as 15 GHz.**
- 4> **Exceptional current handling capability** – up to 2100 mA .
- 5> **RoHS-compliant** – 260°C compatible



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### SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (nH)	TOLERANCE	Q. TYP.	SRF (MHz) TYP.	DCR ( $\Omega$ ) (MAX)	I <sub>rms</sub> (mA) (TYP)
MS1005HP-2N2□-LF	2.2@100MHz	C, G	25@250MHz	15000	0.045	2100
MS1005HP-2N4□-LF	2.4@100MHz	C, G	25@250MHz	14000	0.045	2000
MS1005HP-2N7□-LF	2.7@100MHz	C, G	20@250MHz	13000	0.09	1500
MS1005HP-3N3□-LF	3.3@100MHz	C, G	20@250MHz	12800	0.05	1700
MS1005HP-3N6□-LF	3.6@100MHz	C, G	28@250MHz	11700	0.065	1700
MS1005HP-3N9□-LF	3.9@100MHz	C, G	28@250MHz	9500	0.065	1700
MS1005HP-4N3□-LF	4.3@100MHz	C, G	22@250MHz	7150	0.06	1600
MS1005HP-4N7□-LF	4.7@100MHz	C, G	18@250MHz	6850	0.115	1200
MS1005HP-5N1□-LF	5.1@100MHz	C, G	20@250MHz	6800	0.125	1200
MS1005HP-5N6□-LF	5.6@100MHz	C, G	28@250MHz	6800	0.07	1600
MS1005HP-6N2□-LF	6.2@100MHz	C, G	25@250MHz	5800	0.07	1600
MS1005HP-6N8□-LF	6.8@100MHz	G, J, K	25@250MHz	5800	0.095	1450
MS1005HP-7N5□-LF	7.5@100MHz	G, J, K	25@250MHz	5400	0.13	1400
MS1005HP-8N2□-LF	8.2@100MHz	G, J, K	30@250MHz	5400	0.08	1500
MS1005HP-8N7□-LF	8.7@100MHz	G, J, K	30@250MHz	5000	0.085	1420
MS1005HP-9N0□-LF	9.0@100MHz	G, J, K	28@250MHz	5000	0.09	1420
MS1005HP-9N5□-LF	9.5@100MHz	G, J, K	30@250MHz	4700	0.095	1400
MS1005HP-10N□-LF	10@100MHz	G, J, K	30@250MHz	4700	0.12	1300
MS1005HP-11N□-LF	11@100MHz	G, J, K	30@250MHz	4700	0.095	1400
MS1005HP-12N□-LF	12@100MHz	G, J, K	25@250MHz	4400	0.11	1200
MS1005HP-13N□-LF	13@100MHz	G, J, K	30@250MHz	4200	0.140	1200
MS1005HP-15N□-LF	15@100MHz	G, J, K	30@250MHz	3900	0.130	1100
MS1005HP-16N□-LF	16@100MHz	G, J, K	30@250MHz	3700	0.15	850
MS1005HP-18N□-LF	18@100MHz	G, J, K	30@250MHz	3550	0.16	900
MS1005HP-19N□-LF	19@100MHz	G, J, K	30@250MHz	3500	0.175	850
MS1005HP-20N□-LF	20@100MHz	G, J, K	30@250MHz	3500	0.22	780
MS1005HP-22N□-LF	22@100MHz	G, J, K	30@250MHz	3300	0.21	780
MS1005HP-23N□-LF	23@100MHz	G, J, K	30@250MHz	3300	0.21	700

All specifications are subject to change without notice.

Our specification limits the quality of the component to a single unit. Please ensure the component is thoroughly evaluated in your application circuit.

Revised JAN 2020



## High Q Ceramic Chip Inductors - MS1005HP SERIES

### SPECIFICATION TABLE

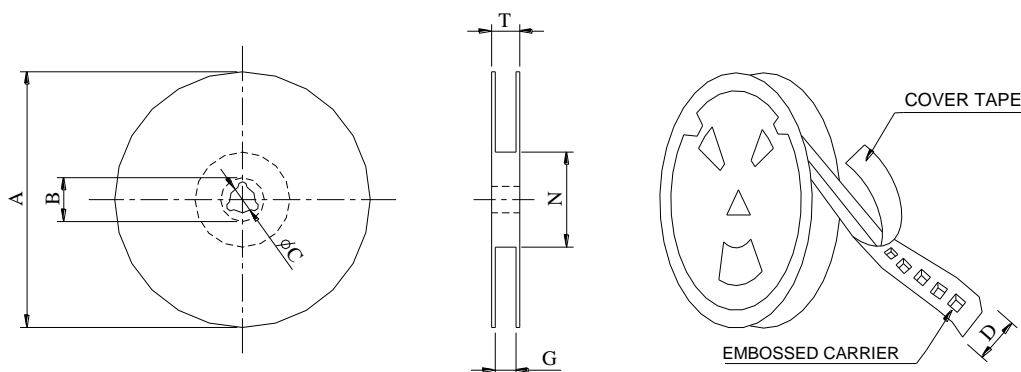
PART NUMBER	INDUCTANCE (nH)	TOLERANCE	Q. TYP.	SRF (MHz) TYP.	DCR ( $\Omega$ ) (MAX)	Irms (mA) (TYP)
MS1005HP-24N□-LF	24@100MHz	G, J, K	30@250MHz	3150	0.26	700
MS1005HP-27N□-LF	27@100MHz	G, J, K	30@250MHz	3200	0.30	450
MS1005HP-30N□-LF	30@100MHz	G, J, K	30@250MHz	2900	0.35	450
MS1005HP-33N□-LF	33@100MHz	G, J, K	30@250MHz	2800	0.38	490
MS1005HP-36N□-LF	36@100MHz	G, J, K	30@250MHz	2800	0.48	480
MS1005HP-39N□-LF	39@100MHz	G, J, K	30@250MHz	2600	0.52	450
MS1005HP-43N□-LF	43@100MHz	G, J, K	30@250MHz	2500	0.72	450
MS1005HP-47N□-LF	47@100MHz	G, J, K	25@200MHz	2400	0.72	420
MS1005HP-51N□-LF	51@100MHz	G, J, K	25@200MHz	2300	0.98	360
MS1005HP-56N□-LF	56@100MHz	G, J, K	25@200MHz	2070	0.996	340
MS1005HP-68N□-LF	68@100MHz	G, J, K	25@200MHz	1840	0.996	320

- Inductance tolerance :G=±2% ; J=±5% ; K=±10% ; C=±0.2nH ; B=±0.1nH
- Inductance is measured in HP-4287A RF LCR meter with HP-16197 fixture.
- SRF is measured in ENA E5071B network analyzer
- DCR is measured in DU-5011 milliohm meter.
- Operating temperature range -40° C to +125° C. (Electrical specifications at 25° C.)

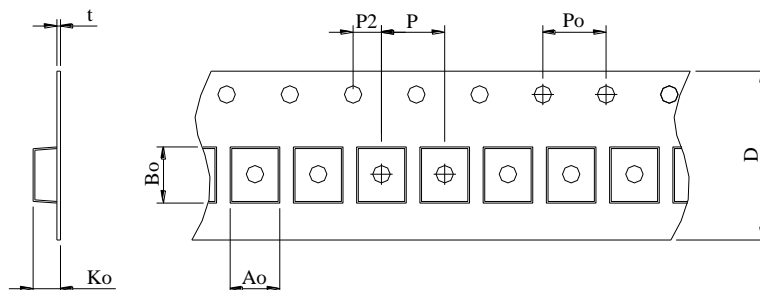
## High Q Ceramic Chip Inductors - MS1005HP SERIES



### PACKAGE SPECIFICATION



\*CARRIER TAPE WIDTH : D



	DIMENSIONS (m/m)														
	Q'TY (PCS)	A	B	C	D	G	N	T	Ao	Bo	Ko	t	P	Po	P2
7"	4,000	178	—	—	8	—	60	—	0.70	1.20	—	0.70	2	4	2