

MS2520 SERIES ~ Wire Wound Ceramic Chip Inductors



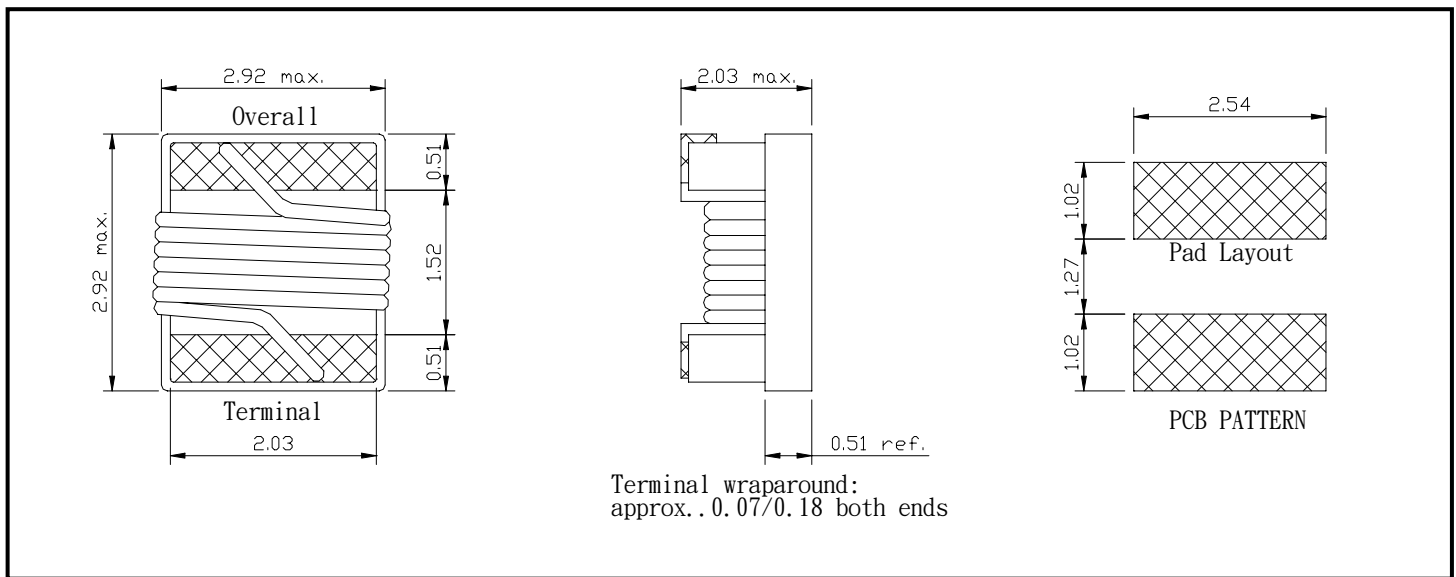
RoHS Compliant

PART NUMBERING SYSTEM

MS	2 5 2 0	—	1 8 N J	—	L F
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE

SHAPES AND DIMENSIONS

UNIT : mm



FEATURES

- Inductance values from **3.3 nH to 8200 nH** (tolerances as low as 1%)
- **Exceptionally high Q** compared to non-wirewound inductors, especially at high frequencies
- Ceramic construction for **highest possible self resonance** (as high as 6000 MHz)
- **Excellent current carrying** capacity for their size
- **RoHS-compliant** 260°C compatible.

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SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (nH)	TOLERANCE	Q. MIN.	SRF (MHz) MIN.	DCR (Ω) (max)	IDC (mA) (max)
MS2520-3N3□-LF	3.3@100MHz	B,S	50@1000MHz	6000	0.06	600
MS2520-6N8□-LF	6.8@100MHz	K,J,G	50@1000MHz	5500	0.06	600
MS2520-8N2□-LF	8.2@100MHz	K,J,G	50@1000MHz	5500	0.06	600
MS2520-10N□-LF	10@100MHz	K,J,G	50@1000MHz	4300	0.08	600
MS2520-12N□-LF	12@100MHz	K,J,G	60@500MHz	3600	0.08	600
MS2520-15N□-LF	15@100MHz	K,J,G	60@500MHz	2700	0.08	600
MS2520-18N□-LF	18@100MHz	K,J,G	60@350MHz	2700	0.10	600
MS2520-22N□-LF	22@100MHz	K,J,G	60@350MHz	2500	0.10	600
MS2520-27N□-LF	27@100MHz	K,J,G	60@350MHz	1800	0.10	600
MS2520-33N□-LF	33@100MHz	K,J,G	60@350MHz	1700	0.10	600
MS2520-39N□-LF	39@100MHz	K,J,G	60@350MHz	1500	0.10	600
MS2520-47N□-LF	47@100MHz	K,J,G	60@350MHz	1500	0.10	600
MS2520-56N□-LF	56@100MHz	K,J,G	60@350MHz	1350	0.12	600
MS2520-68N□-LF	68@100MHz	K,J,G	60@350MHz	1300	0.15	600
MS2520-82N□-LF	82@100MHz	K,J,G	60@350MHz	1100	0.18	600
MS2520-R10□-LF	100@100MHz	K,J,G	60@100MHz	1100	0.18	500
MS2520-R12□-LF	120@25MHz	K,J,G	50@100MHz	950	0.20	500
MS2520-R15□-LF	150@25MHz	K,J,G	50@100MHz	880	0.22	500
MS2520-R18□-LF	180@25MHz	K,J,G	50@100MHz	800	0.33	500
MS2520-R22□-LF	220@25MHz	K,J,G	45@100MHz	730	0.45	500
MS2520-R27□-LF	270@25MHz	K,J,G	45@100MHz	650	0.75	500
MS2520-R33□-LF	330@25MHz	K,J,G	45@100MHz	570	0.90	500

TEST EQUIPMENT: HP-4286A IMPEDANCE ANALYZER

INDUTANCE TOLERANCE : B=±0.15nH, S=±0.3nH, G=±2%, J=±5%, K=±10%

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PART NUMBER	INDUCTANCE (nH)	TOLERANCE	Q. MIN.	SRF (MHz) MIN.	DCR (Ω) (max)	IDC (mA) (max)
MS2520-R39□-LF	390@25MHz	K,J,G	45@100MHz	530	1.20	470
MS2520-R47□-LF	470@25MHz	K,J,G	45@100MHz	480	1.30	470
MS2520-R56□-LF	560@25MHz	K,J,G	45@100MHz	430	1.45	400
MS2520-R62□-LF	620@25MHz	K,J,G	45@100MHz	380	2.45	300
MS2520-R68□-LF	680@25MHz	K,J,G	45@100MHz	380	2.45	400
MS2520-R75□-LF	750@25MHz	K,J,G	45@100MHz	360	2.60	360
MS2520-R82□-LF	820@25MHz	K,J,G	45@100MHz	350	2.75	380
MS2520-R91□-LF	910@25MHz	K,J,G	45@100MHz	330	3.25	380
MS2520-1R0□-LF	1000@25MHz	K,J,G	35@50MHz	290	1.75	370
MS2520-1R2□-LF	1200@7.9MHz	K,J,G	35@50MHz	250	2.0	310
MS2520-1R5□-LF	1500@7.9MHz	K,J,G	28@50MHz	200	2.3	330
MS2520-1R8□-LF	1800@7.9MHz	K,J,G	28@50MHz	160	2.6	300
MS2520-2R2□-LF	2200@7.9MHz	K,J,G	28@50MHz	160	2.8	280
MS2520-2R7□-LF	2700@7.9MHz	K,J,G	22@25MHz	140	3.2	290
MS2520-3R3□-LF	3300@7.9MHz	K,J,G	22@25MHz	110	3.4	290
MS2520-3R9□-LF	3900@7.9MHz	K,J,G	20@25MHz	100	3.6	260
MS2520-4R7□-LF	4700@7.9MHz	K,J,G	20@25MHz	90	4.0	260
MS2520-5R6□-LF	5600@7.9MHz	K,J	16@7.9MHz	20	4.0	240
MS2520-6R8□-LF	6800@7.9MHz	K,J	18@7.9MHz	40	4.9	200
MS2520-8R2□-LF	8200@7.9MHz	K,J	18@7.9MHz	25	6.0	170

TEST EQUIPMENT: HP-4286A IMPEDANCE ANALYZER

INDUTANCE TOLERANCE : B=±0.15nH, S=±0.3nH, G=±2%, J=±5%, K=±10%

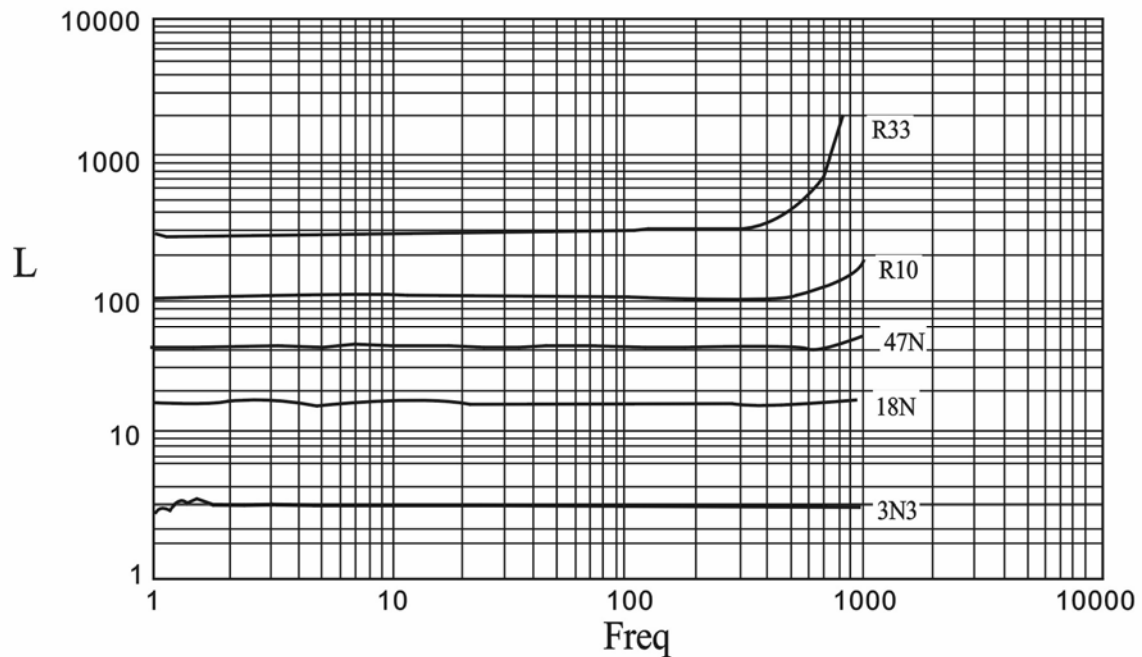
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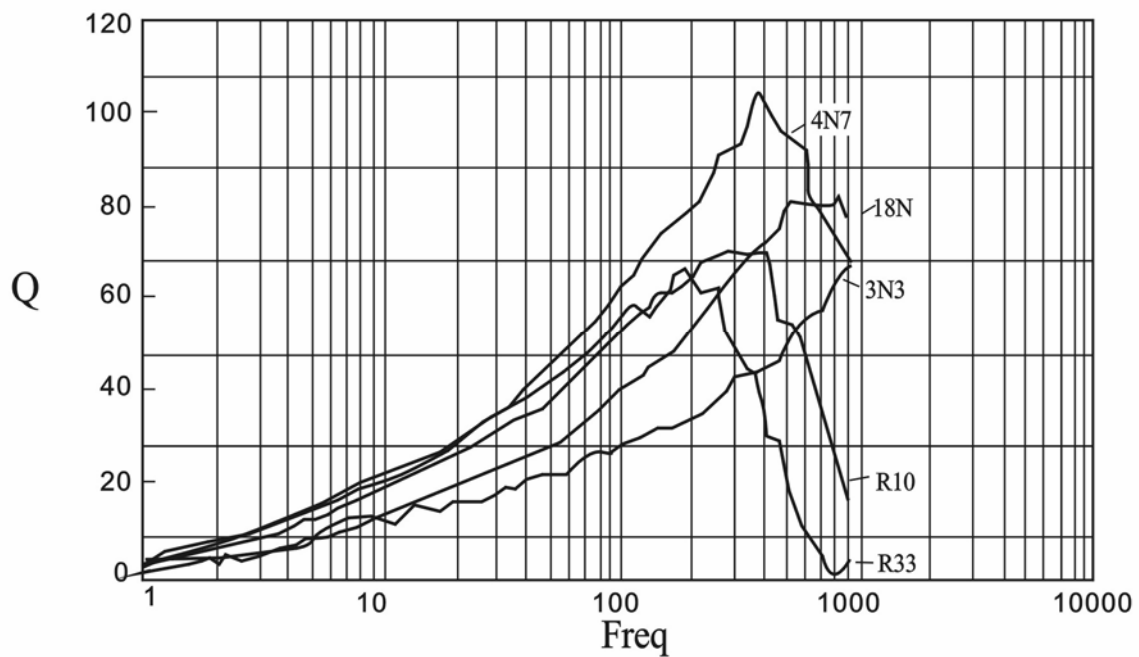
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TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS

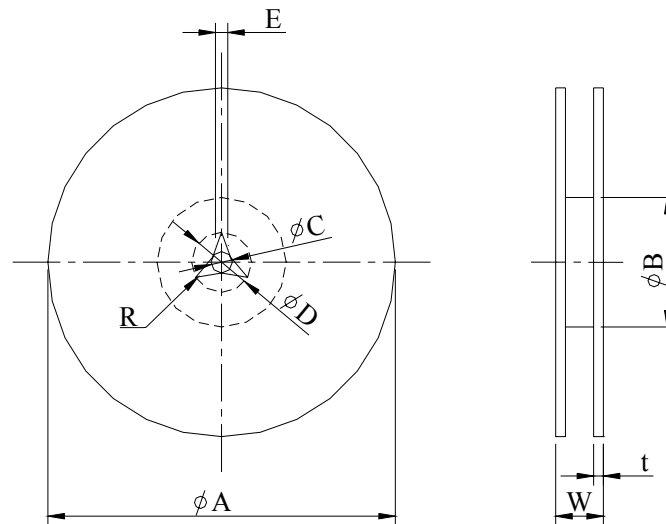


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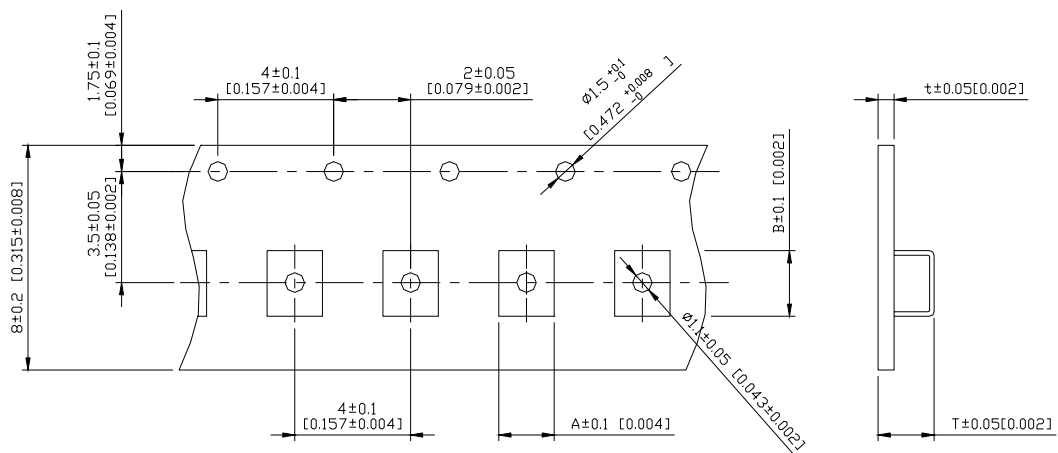
PACKAGING SPECIFICATION



it



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



TYPE	A	B	T	t	T(ϕ 178mm)	T(ϕ 330mm)
MS2520	1.90	3.50	1.40	0.2	2000 pcs/reel	-