

MS3225 SERIES ~ Wire Wound Ceramic Chip Inductors

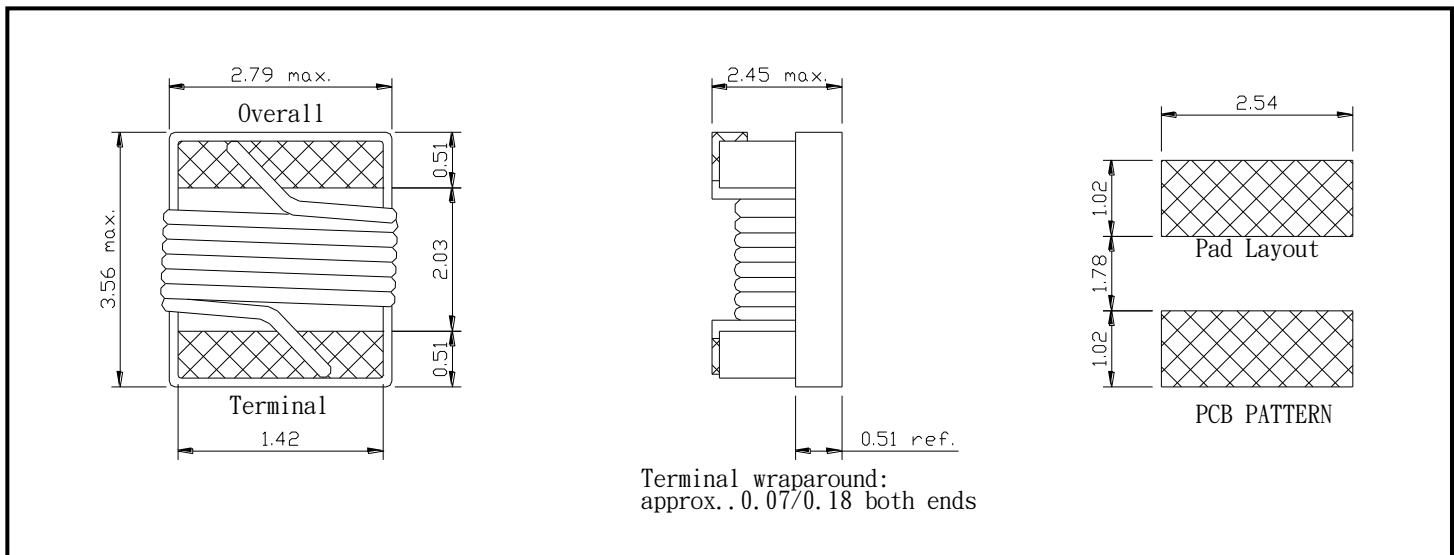


PART NUMBERING SYSTEM

| | | | | | | |
|-----------|---|-------------|---|-------------|---|-----------|
| MS | — | 3225 | — | 47NJ | — | LF |
| TYPE | | DIMENSIONS | | INDUCTANCE | | LEAD FREE |

SHAPES AND DIMENSIONS

UNIT : mm



FEATURES

- Size : 3.56(L)x2.79(W)x2.45(Ht)mm Max
- Inductance values from 4.7 nH to 2,200 nH (tolerances as low as 1%)
- **Exceptionally high Q** compared to non-wire wound 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) |
|----------------|--------------------|-----------|------------|-------------------|---------------------------|-------------------|
| MS3225-4N7□-LF | 4.7@100MHz | B,S | 50@1000MHz | 6000 | 0.06 | 1000 |
| MS3225-5N6□-LF | 5.6@100MHz | B,J,K | 50@1000MHz | 5500 | 0.08 | 1000 |
| MS3225-10N□-LF | 10@100MHz | G,K,J | 60@500MHz | 4000 | 0.06 | 1000 |
| MS3225-12N□-LF | 12@100MHz | G,K,J | 60@500MHz | 3400 | 0.06 | 1000 |
| MS3225-15N□-LF | 15@100MHz | G,K,J | 60@500MHz | 3200 | 0.06 | 1000 |
| MS3225-18N□-LF | 18@100MHz | G,K,J | 60@300MHz | 2800 | 0.06 | 1000 |
| MS3225-22N□-LF | 22@100MHz | G,K,J | 60@300MHz | 2300 | 0.08 | 1000 |
| MS3225-27N□-LF | 27@100MHz | G,K,J | 60@300MHz | 2000 | 0.08 | 1000 |
| MS3225-33N□-LF | 33@100MHz | G,K,J | 60@300MHz | 1800 | 0.08 | 1000 |
| MS3225-39N□-LF | 39@100MHz | G,K,J | 60@300MHz | 1800 | 0.08 | 1000 |
| MS3225-47N□-LF | 47@100MHz | G,K,J | 60@300MHz | 1600 | 0.08 | 1000 |
| MS3225-56N□-LF | 56@100MHz | G,K,J | 60@300MHz | 1500 | 0.10 | 1000 |
| MS3225-68N□-LF | 68@100MHz | G,K,J | 60@300MHz | 1300 | 0.10 | 1000 |
| MS3225-82N□-LF | 82@100MHz | G,K,J | 60@300MHz | 1200 | 0.10 | 1000 |
| MS3225-R10□-LF | 100@100MHz | G,K,J | 60@300MHz | 1100 | 0.10 | 1000 |
| MS3225-R12□-LF | 120@50MHz | G,K,J | 60@300MHz | 900 | 0.12 | 800 |
| MS3225-R15□-LF | 150@50MHz | G,K,J | 60@300MHz | 800 | 0.18 | 800 |
| MS3225-R18□-LF | 180@50MHz | G,K,J | 60@300MHz | 760 | 0.21 | 800 |
| MS3225-R22□-LF | 220@50MHz | G,K,J | 60@300MHz | 660 | 0.27 | 800 |
| MS3225-R27□-LF | 270@50MHz | G,K,J | 50@300MHz | 600 | 0.33 | 700 |
| MS3225-R33□-LF | 330@50MHz | G,K,J | 50@100MHz | 550 | 0.37 | 650 |
| MS3225-R39□-LF | 390@50MHz | G,K,J | 50@100MHz | 500 | 0.63 | 600 |
| MS3225-R47□-LF | 470@50MHz | G,K,J | 50@100MHz | 450 | 0.69 | 550 |
| MS3225-R56□-LF | 560@50MHz | G,K,J | 50@100MHz | 400 | 0.90 | 450 |
| MS3225-R68□-LF | 680@25MHz | G,K,J | 50@100MHz | 380 | 1.05 | 400 |
| MS3225-R82□-LF | 820@25MHz | G,K,J | 50@100MHz | 350 | 1.45 | 350 |
| MS3225-1R0□-LF | 1000@25MHz | G,K,J | 45@50MHz | 300 | 1.90 | 280 |
| MS3225-1R2□-LF | 1200@25MHz | G,K,J | 45@50MHz | 300 | 2.20 | 250 |
| MS3225-1R5□-LF | 1500@25MHz | G,K,J | 45@50MHz | 250 | 2.43 | 220 |
| MS3225-1R8□-LF | 1800@25MHz | G,K,J | 45@50MHz | 200 | 3.36 | 180 |
| MS3225-2R2□-LF | 2200@25MHz | G,K,J | 45@50MHz | 200 | 3.50 | 150 |

TEST EQUIPMENT:HP-4286A IMPEDANCE ANALYZER

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

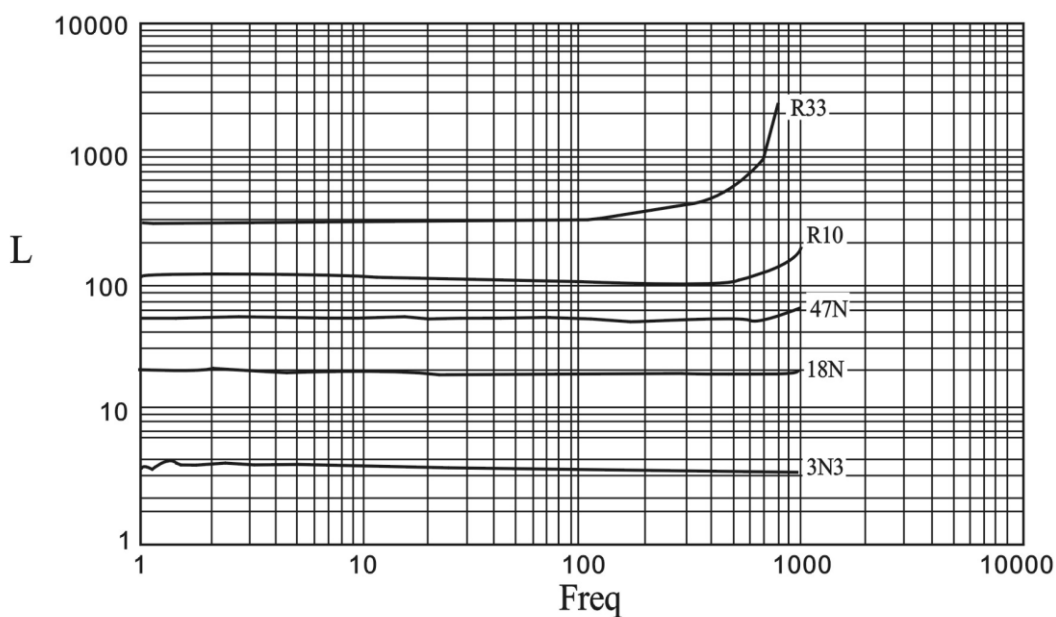


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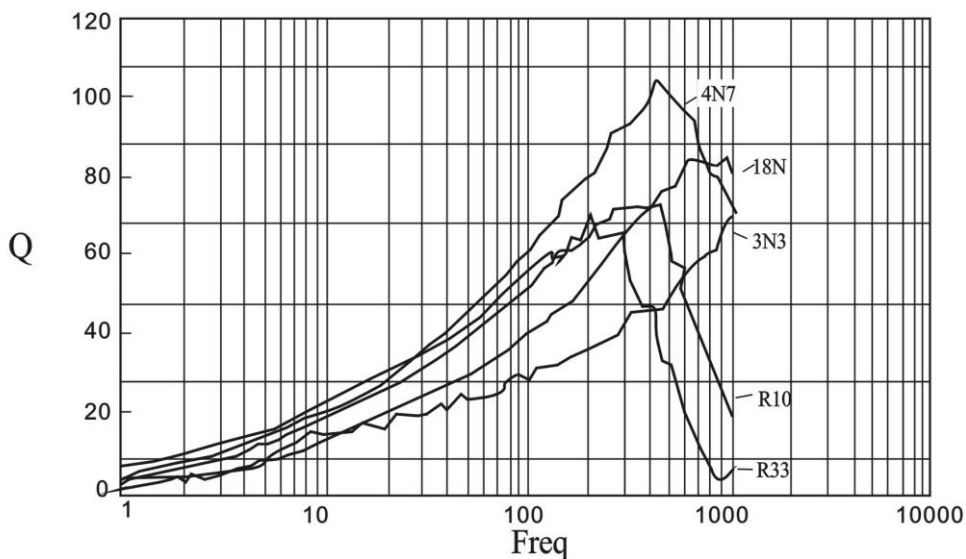


ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



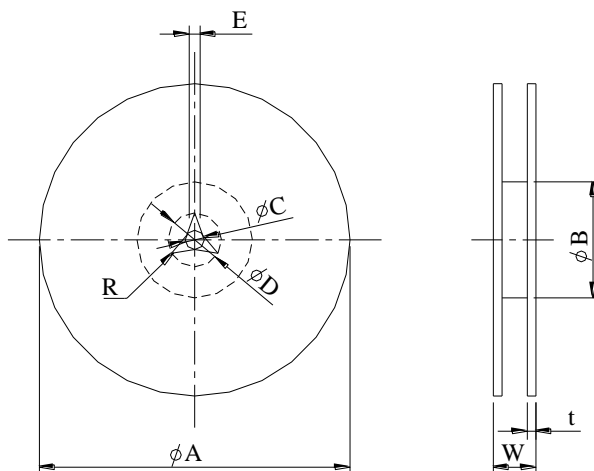
Q vs. FREQUENCY CHARACTERISTICS



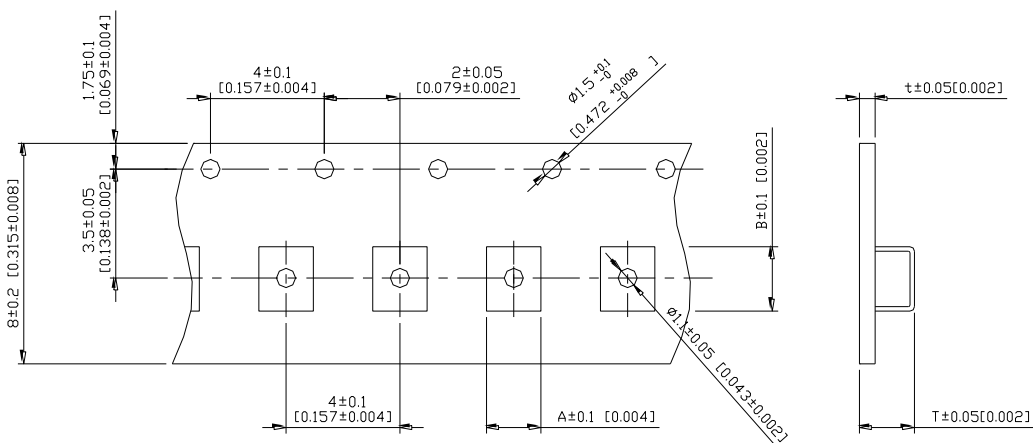
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PACKAGING SPECIFICATION



| | A | B | C | D | E | W8 | W12 | t | R |
|-------------------|--------|-------|---------|---------|---|--------|----------|----------|---|
| T(ψ178mm) Reel | ψ178±2 | ψ60±1 | ψ13±0.8 | ψ21±0.8 | 2 | 10±1.5 | 14.5±1.5 | 1.27±0.2 | 1 |



| TYPE | A | B | T | t | T(ψ178mm) | T(ψ330mm) |
|--------|------|------|------|------|---------------|-----------|
| MS3225 | 2.90 | 3.60 | 1.70 | 0.25 | 2000 pcs/reel | - |