

# MOX-MCI-1008



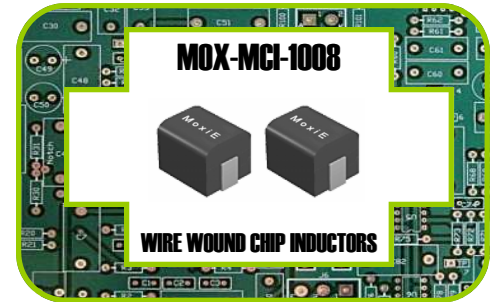
**MoxiE**  
INDUCTOR CORPORATION

## Wire Wound Molded Chip Inductors

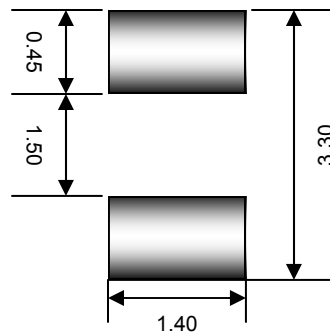
MoxiE's MOX-MCI-1008 series of surface mount molded chip inductors are widely used in cable modems, notebooks, LCD televisions and digital cameras. The MCI series provides a wide range of inductance values and an excellent Q factor.

### Features:

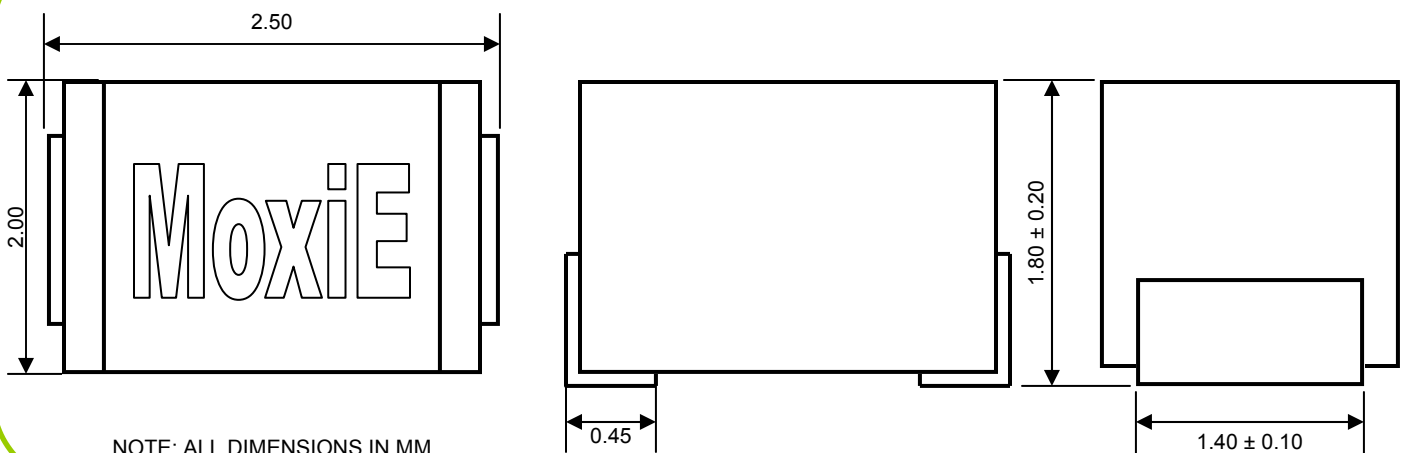
- Operating temperature: -40°C to +85°C.
- Excellent solderability & resistance to soldering heat.
- RoHS Compliant.
- JIS/EIA dimensions, high reliability & easy surface mount assembly.
- Tape & reel packaging (2,000 pieces per reel)



## LANDING PATTERN



## MECHANICAL DIMENSIONS



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# MOX-MCI-1008



## ELECTRICAL SPECIFICATIONS

| MoxiE Part Number | Inductance (μH) | Tolerance (%) | Q Min. | Test Freq. (MHz) | SRF Min. (MHz) | RDC Max. (Ω) | IDC Max. (mA) |
|-------------------|-----------------|---------------|--------|------------------|----------------|--------------|---------------|
| MOX-MCI-1008-R12□ | 0.12            | K, M          | 30     | 25.2             | 600            | 0.37         | 520           |
| MOX-MCI-1008-R15□ | 0.15            | K, M          | 30     | 25.2             | 550            | 0.42         | 480           |
| MOX-MCI-1008-R18□ | 0.18            | K, M          | 30     | 25.2             | 500            | 0.46         | 460           |
| MOX-MCI-1008-R22□ | 0.22            | K, M          | 30     | 25.2             | 450            | 0.52         | 430           |
| MOX-MCI-1008-R27□ | 0.27            | K, M          | 30     | 25.2             | 425            | 0.56         | 420           |
| MOX-MCI-1008-R33□ | 0.33            | K, M          | 30     | 25.2             | 400            | 0.60         | 400           |
| MOX-MCI-1008-R39□ | 0.39            | K, M          | 30     | 25.2             | 375            | 0.65         | 375           |
| MOX-MCI-1008-R47□ | 0.47            | K, M          | 30     | 25.2             | 350            | 0.68         | 350           |
| MOX-MCI-1008-R56□ | 0.56            | K, M          | 30     | 25.2             | 300            | 0.75         | 325           |
| MOX-MCI-1008-R68□ | 0.68            | K, M          | 30     | 25.2             | 270            | 0.85         | 300           |
| MOX-MCI-1008-R82□ | 0.82            | K, M          | 30     | 25.2             | 250            | 1.00         | 260           |
| MOX-MCI-1008-1R0□ | 1.0             | J, K          | 30     | 7.96             | 220            | 1.10         | 245           |
| MOX-MCI-1008-1R2□ | 1.2             | J, K          | 30     | 7.96             | 180            | 1.20         | 230           |
| MOX-MCI-1008-1R5□ | 1.5             | J, K          | 30     | 7.96             | 135            | 1.30         | 220           |
| MOX-MCI-1008-1R8□ | 1.8             | J, K          | 30     | 7.96             | 100            | 1.40         | 210           |
| MOX-MCI-1008-2R2□ | 2.2             | J, K          | 30     | 7.96             | 75             | 1.55         | 200           |
| MOX-MCI-1008-2R7□ | 2.7             | J, K          | 30     | 7.96             | 55             | 1.70         | 195           |
| MOX-MCI-1008-3R3□ | 3.3             | J, K          | 30     | 7.96             | 48             | 1.90         | 185           |
| MOX-MCI-1008-3R9□ | 3.9             | J, K          | 30     | 7.96             | 43             | 2.10         | 180           |
| MOX-MCI-1008-4R7□ | 4.7             | J, K          | 25     | 7.96             | 40             | 2.30         | 175           |
| MOX-MCI-1008-5R6□ | 5.6             | J, K          | 25     | 7.96             | 36             | 2.50         | 170           |
| MOX-MCI-1008-6R8□ | 6.8             | J, K          | 25     | 7.96             | 33             | 2.70         | 165           |
| MOX-MCI-1008-8R2□ | 8.2             | J, K          | 25     | 7.96             | 30             | 3.05         | 160           |
| MOX-MCI-1008-100□ | 10              | J, K          | 25     | 2.52             | 27             | 3.50         | 155           |
| MOX-MCI-1008-120□ | 12              | J, K          | 25     | 2.52             | 23             | 3.80         | 150           |
| MOX-MCI-1008-150□ | 15              | J, K          | 25     | 2.52             | 20             | 4.40         | 140           |
| MOX-MCI-1008-180□ | 18              | J, K          | 25     | 2.52             | 18             | 4.80         | 130           |
| MOX-MCI-1008-220□ | 22              | J, K          | 25     | 2.52             | 17             | 5.50         | 125           |
| MOX-MCI-1008-270□ | 27              | J, K          | 25     | 2.52             | 16             | 6.30         | 115           |
| MOX-MCI-1008-330□ | 33              | J, K          | 25     | 2.52             | 15             | 7.10         | 110           |
| MOX-MCI-1008-390□ | 39              | J, K          | 20     | 2.52             | 14             | 9.50         | 90            |
| MOX-MCI-1008-470□ | 47              | J, K          | 20     | 2.52             | 13             | 11.10        | 80            |
| MOX-MCI-1008-560□ | 56              | J, K          | 20     | 2.52             | 12             | 12.10        | 75            |
| MOX-MCI-1008-680□ | 68              | J, K          | 20     | 2.52             | 11             | 15.50        | 75            |
| MOX-MCI-1008-820□ | 82              | J, K          | 20     | 2.52             | 11             | 16.60        | 70            |
| MOX-MCI-1008-101□ | 100             | J, K          | 15     | 0.796            | 9              | 21.00        | 60            |



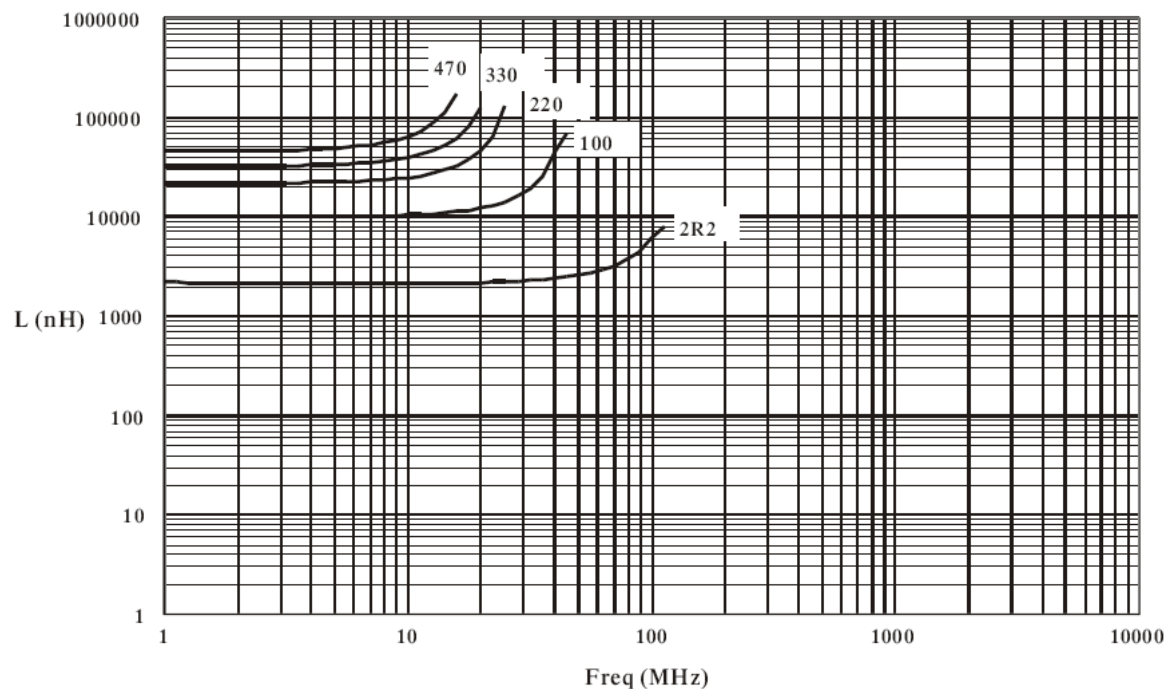
## MOX-MCI ENGINEERING NOTES

- Core: Ferrite core.
- Wire: Polyurethane Enameled Copper Wire
- Leads: Soldered Plated.
- Enclosure: Heat Hardened Resin
- Measuring Frequency (L) 100 kHz
- Available Tolerances: J= 5%, K= ±10% M= ±20%
- Q is measured on a HP-4287A RF LCR meter with a HP-16193 fixture attached.
- RoHS Compliant.
- MoxiE Inductor Corporation specifications are subject to change without notice.

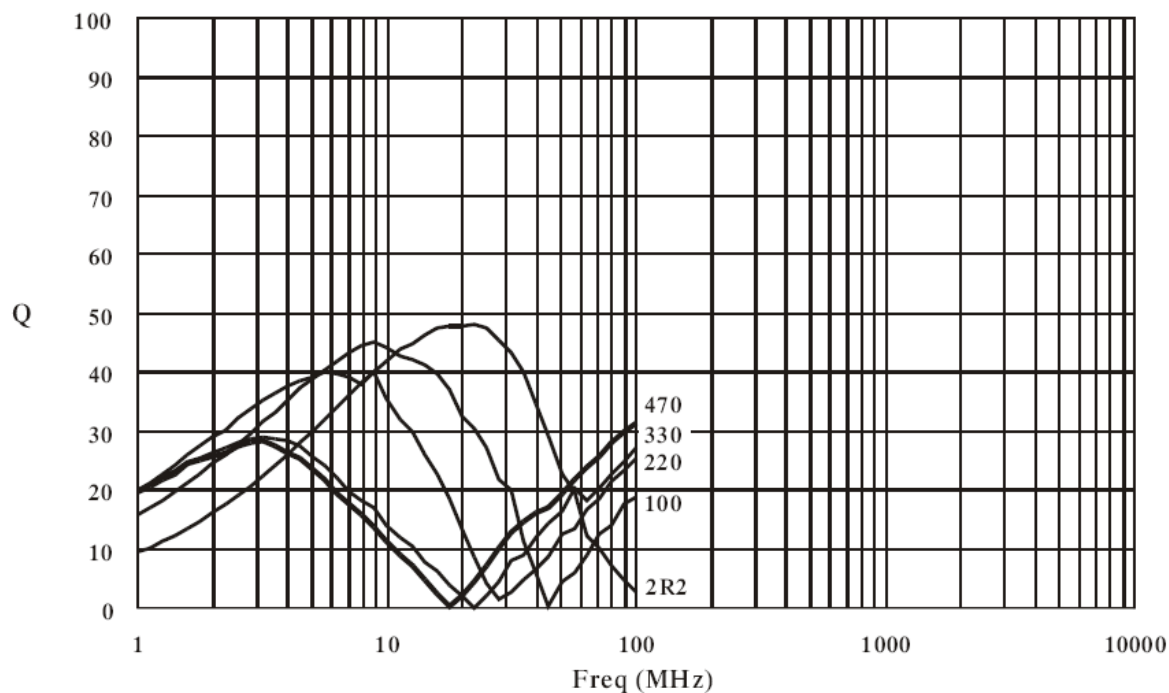
Revision A (06-19-2008)



## L vs FREQUENCY PLOT



## Q vs FREQUENCY PLOT



Revision A (06-19-2008)