

Suppression Coils

FASTRON's suppression coils come with high rated currents and low DC resistance characteristics. Inductance values range from 1µH to 10000µH. They are available in tape and ammo pack packaging.

Applications Communication: RF blocking, filtering and decoupling Others: entertainment electronics and interference suppression

| Technical Data | L – Value (rated inductance) | Measured with Bode 100 Vector Network Analyzer or equivalent at frequency fL | | | | |
|-----------------------|--|--|--|--|--|--|
| | DCR (max) | Measured at 25°C | | | | |
| | Rated DC Current | I based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C | | | | |
| | Operating Temperature | -55°C to +125°C (including component self-heating) | | | | |
| | Recommended Soldering Method | Wave | | | | |
| | Moisture Sensitivity Levels (MSL) | MSL Level 1, indicating unlimited floor life at \leq 30°C / 85% relative humidity | | | | |
| | Solderability | Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta) | | | | |
| | Resistance to Soldering Heat | Resistant to $260^{\circ}C \pm 5^{\circ}C$ for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb) | | | | |
| | Resistance to Solvent | Resistant to isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45 | | | | |
| | Climatic Test | Defined by the following standards IEC 68-2-1 for cold test: -55°C for 96 hours IEC 68-2-2 for dry heat test: +125°C for 96 hours IEC 60068-2-78 for humidity test: 40°C at RH 95% for 4 days | | | | |
| | Thermal Shock Test | Temperature cycle: -55°C to +125°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G | | | | |
| | Tensile Strength of Leads (Pull Test) | Components withstand a pulling force of 20N for 10 ± 1 seconds IEC 60068-2-21 (Ua ₁) | | | | |
| | Mechanical Shock | Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine | | | | |
| | Vibration | Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations | | | | |

Ordering Code Example: MISC-100X-YY

MISC -100 Х YY -(Model) (Inductance Value) (Tolerance) (Packaging Code)

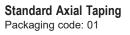
→

MISC-100M-01

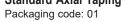
Core Types - Ferrite, Iron Dust Tolerances - K (10%), M (20%) Packaging Code - 00 (Loose in Box), 01 (Taped / Reel)

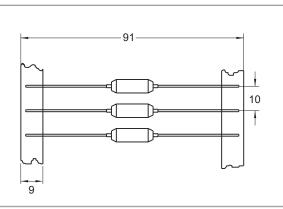


Packaging Specification









Recommended forming pitch

| r | Series | MISC | SMSC | MESC | LASC | SSSC | MSSC | LSSC | 77A |
|--------------------------------|-------------------|------|------|------|-------------|------|------|------|--------------|
| ⊸_p min_ → | p min (mm) | 17.5 | 22.5 | 28 | 32.5 | 27.5 | 32.5 | 37.5 | 29.5 (33.5*) |
| *only valid for 77A-3R9M | | | | | 77A-3R9M-00 | | | | |



FASTRON's Component Key Characteristics



Approved according to AEC-Q200



Approved according to AEC-Q200 with High Temperature



Suitable for High Temperature



Part is RoHS conform and Halogen free



Mechanical Shock and Vibration Proof



Designed for High Q-values



Exceptionally High Q-values



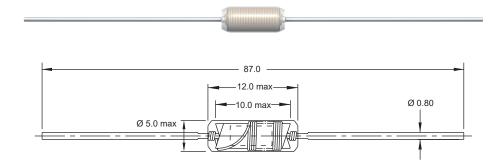
Optimized for High Currents

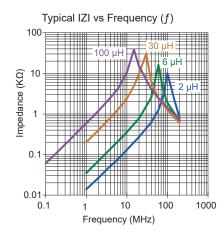


Optimized for High Voltages









| | Part No | Inductance | f∟ | Tol | DCR max | Rated DC Current | | |
|--------------|--------------------------|------------|-------|-------|----------------------------|---------------------|--|--|
| | Fartilo | L (µH) | (kHz) | ± (%) | (mΩ) | (A) | | |
| Single layer | -MISC-1R0M-01 | 1 | 1000 | 20 | 18 | 4 | | |
| | MISC-2R0M-01 | 2 | 1000 | 20 | 54 | 3 | | |
| | MISC-3R0M-01 | 3 | 1000 | 20 | 93 | 2 | | |
| | MISC-6R0M-01 | 6 | 1000 | 20 | 228 | 1.5 | | |
| | MISC-140M-01 | 14 | 100 | 20 | 912 | 0.7 | | |
| | MISC-300M-01 | 30 | 100 | 20 | 3240 | 0.4 | | |
| | MISC-400M-01 | 40 | 100 | 20 | 4290 | 0.3 | | |
| | -MISC-101M-01 | 100 | 100 | 20 | 22800 | 0.15 | | |
| | Core Material: Iron Dust | | | | Revision date: 27 Apr 2017 | | | |

| SPQ: | Packaging Form | Taped / Reel | | |
|------|----------------|--------------|--|--|
| | Axial | 1500 [-01] | | |

Remarks:

- Available also without insulating material (MISC/B)

- Single layer - Model with Insulation Foil are suitable for Application in "Power Line", rated voltage 230V AC (Testvoltage 500V DC).

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Fastron:

<u>MISC-140M-01</u> <u>MISC-1R0M-01</u> <u>MISC-3R0M-01</u> <u>MISC-2R0M-01</u> <u>MISC-6R0M-01</u> <u>MISC-400M-01</u> <u>MISC-300M-01</u> <u>MISC-101M-01</u>