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 f_L
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 ≤ 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°C ± 5°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

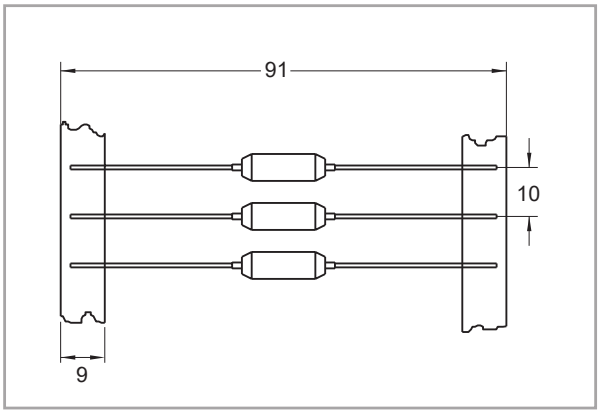
MISC - **100** **X** - **YY** ➔ **MISC-100M-01**
(Model) (Inductance Value) (Tolerance) (Packaging Code)

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

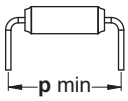
Packaging Specification

Standard Axial Taping

Packaging code: 01



Recommended forming pitch



Series	MISC	SMSC	MESC	LASC	SSSC	MSSC	LSSC	77A
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-00**

FASTRON's Component Key Characteristics

Approved according to AEC-Q200

Approved according to AEC-Q200 with High Temperature

Suitable for High Temperature

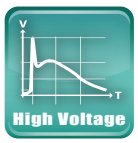
Part is RoHS conform and Halogen free

Mechanical Shock and Vibration Proof

Designed for High Q-values

Exceptionally High Q-values

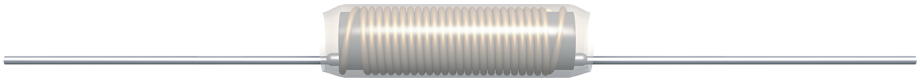
Optimized for High Currents

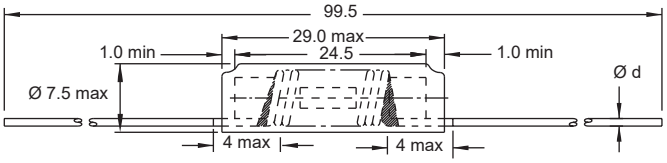


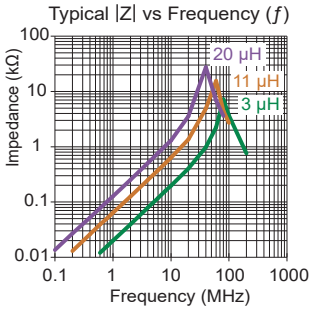
Optimized for High Voltages

MSSC

RoHS Halogen Free | Mechanical Shock Vibration Proof | High Current







	Part No	Inductance L (µH)	f_L (MHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)	Ø d (mm)
Single layer	MSSC-3R0M-00	3	1	20	6	9	1.18
	MSSC-6R0M-00	6	1	20	10	6	0.95
	MSSC-110M-00	11	0.1	20	20	4	0.70
	MSSC-130M-00	13	0.1	20	24	3	0.70
	MSSC-200M-00	20	0.1	20	54	3	0.50

Core Material: Ferrite

Revision date: 11 Aug 2014

SPQ:

Packaging Form	Loose / Box
Axial	350 [-00]

Remarks: - Available also without insulating material (MSSC/B)
- Single layer - Model with Insulation Foil are suitable for application in “Power Line”, rated voltage 230V AC (Testvoltage 500V DC).