

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)

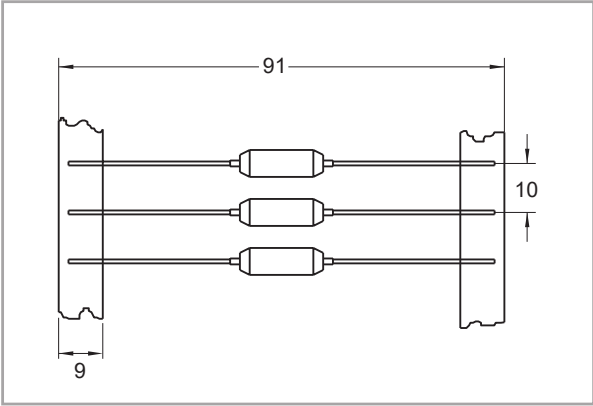
Core Types - Ferrite, Iron Dust

Tolerances - K (10%), M (20%)

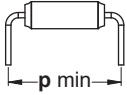
Packaging Code - 00 (Loose in Box), 01 (Taped / Reel)

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

77A

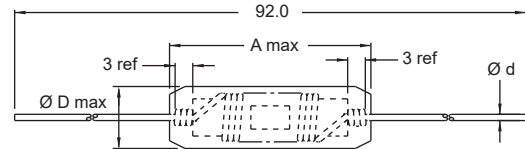
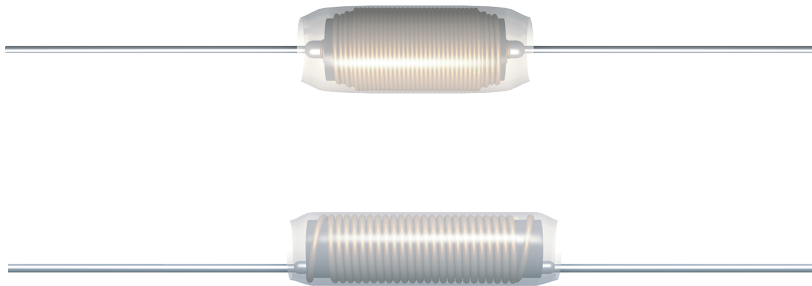


Fig 1

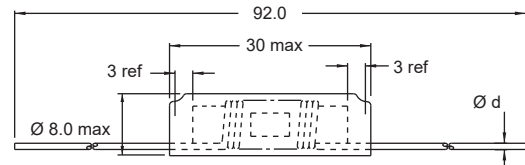
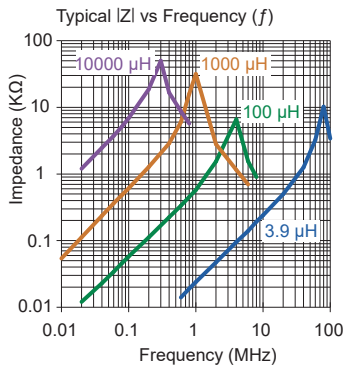


Fig 2



Single layer

Part No	Inductance L (μH)	f _L (kHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current (A)	Dimension (mm) A max	Ø D max	Ø d	Fig
*77A-3R9M-00	3.9	1000	20	0.011	12.0	30	8	1.0	2
*77A-5R6M-YY	5.6	1000	20	0.021	8.0	26	8	0.8	1
*77A-100M-YY	10	1000	20	0.042	5.0	26	8	0.8	1
77A-150M-YY	15	100	20	0.060	4.0	26	9	0.8	1
77A-330M-YY	33	100	20	0.084	3.5	26	10	0.8	1
77A-400M-YY	40	100	20	0.084	3.0	26	11	0.8	1
77A-680M-YY	68	100	20	0.12	3.0	26	11	0.8	1
77A-800M-YY	80	100	20	0.15	2.5	26	11	0.8	1
77A-101M-YY	100	100	20	0.18	2.5	26	11	0.8	1
77A-121M-YY	120	100	20	0.36	2.0	26	11	0.8	1
77A-151M-YY	150	100	20	0.36	1.8	26	11	0.8	1
77A-331M-YY	330	100	20	0.60	1.4	26	11	0.8	1
77A-471M-YY	470	100	20	1.20	1.0	26	11	0.8	1
77A-501M-YY	500	100	20	0.84	1.2	26	11	0.8	1
77A-681M-YY	680	100	20	1.20	1.0	26	11	0.8	1
77A-821M-YY	820	100	20	1.20	0.95	26	11	0.8	1
77A-102M-YY	1000	100	20	1.80	0.80	26	11	0.8	1
77A-152M-YY	1500	10	20	2.40	0.70	26	11	0.8	1
77A-332M-YY	3300	10	20	4.80	0.50	26	11	0.8	1
77A-472M-YY	4700	10	20	6.80	0.36	26	11	0.8	1
77A-562M-YY	5600	10	20	9.60	0.36	26	11	0.8	1
77A-682M-YY	6800	10	20	9.60	0.35	26	11	0.8	1
77A-103M-YY	10000	10	20	14.4	0.30	26	11	0.8	1

Core Material: Ferrite

Revision date: 30 Aug 2016

SPQ:	Loose / Box	Taped / Reel
	300 [-00]	500 [-01]

Remarks:

- Available also without insulating material for 77A/B-5R6M and 77A/B-100M.
- * Mechanical shock and vibration proof.
- Single layer - Model with Insulation Foil are suitable for Application in "Power Line", rated voltage 230V AC (Testvoltage 500V DC).

Mouser Electronics

Authorized Distributor

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