

Leaded Inductors (Fixed Choke Coils)

FASTRON leaded inductors come with a very wide inductance range from 0.1µH to 100000µH and with high Q values. They are available in tape and ammpack packing.

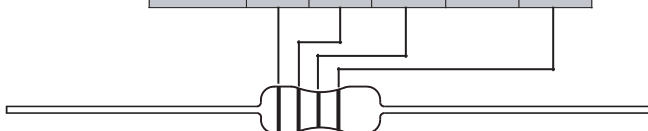
Applications These components are suitable for decoupling and interference suppression.
Communication: RF blocking and filtering, e.g. 12 ~ 16 kHz blocking filter.
Others: Automotive electronics, electronic household appliances, entertainment electronics, lighting devices, medical applications.

Technical Data

L – Value (rated inductance)	Measured with Bode 100 Vector Network Analyzer or equivalent at frequency f_L
Q – Factor (min)	Measured with Bode 100 Vector Network Analyzer or equivalent at frequency f_Q
SRF (min)	Measured with HP 8753ES Network Analyzer or equivalent
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 I1 Current based on ambient temperature of 40°C and component temperature of max. 125°C Isat Current based on inductivity drop of 10% related to the unloaded inductivity
Operating Temperature	-55°C to +125°C (including component self-heating)
Recommended soldering method	Wave
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
Tensile Strength of Leads (Pull Test)	Components withstand a pulling force of 10N for 10 ± 1 second For MICC, MICC/N, MICCS, MICCS/N : Components withstand a pulling force of 5N for 10 ± 1 second IEC 60068-2-21 (Ua1)
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

Colour Coding Reference according to IEC 60062 :

Code	Nominal Inductance (µH)				Tol. **
	Band 1	Band 2	Band 3	Band 4	
Gold	---	---	x 0.1	± 5 %	J
Silver	---	---	x0.01	± 10 %	K
Clear	---	---	---	± 20 %	M
Black	---	0	x1	---	---
Brown	1	1	x10	± 1 %	F
Red	2	2	x100	± 2 %	G
Orange	3	3	x1000	± 3 %	A
Yellow	4	4	x10000	---	---
Green	5	5	---	---	---
Blue	6	6	---	---	---
Violet	7	7	---	---	---
Grey	8	8	---	---	---
White	9	9	---	---	---



Ordering Code

Example: SMCC-180X-YY

SMCC - **180** **X** - **YY**
(Model) (Inductance Value) (Tolerance) (Packing Code)



SMCC-180K-01

Core Type - Ferrite, Phenolic
Tolerances - F (1%), G (2%), H (2.5%), A (3%), J (5%), K (10%), M (20%)

Packing Code	Packing Form	Taped / Reel	Taped / Ammo pack
	Axial	01	02
	Radial	31	32

Packing Specification

Fig. 1: On Reel (Plastic)

Packing code : 01, 31

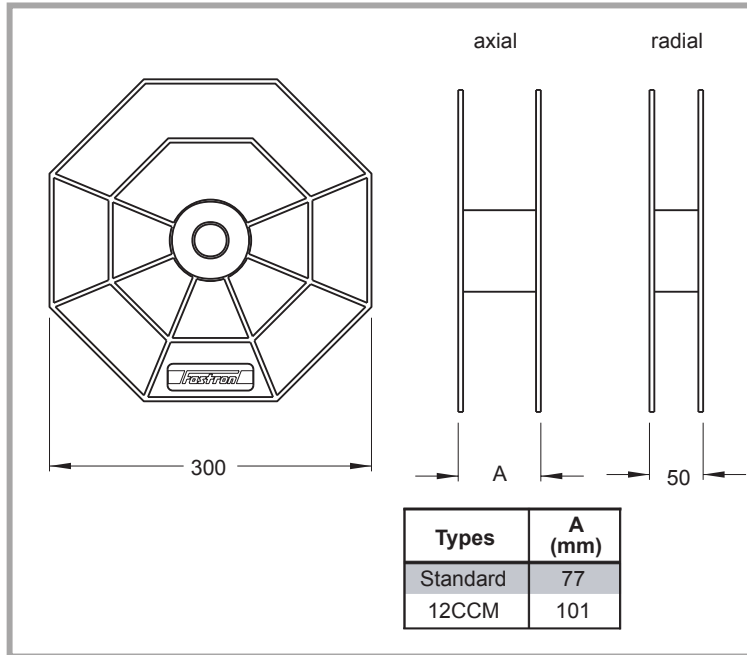


Fig. 2: Ammo pack, axial

Packing code : 02

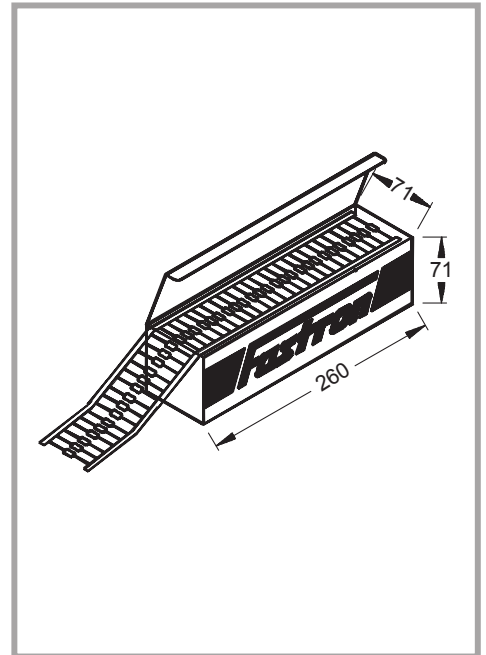


Fig. 3: Axial Standard Taping

Packing code : 01, 02

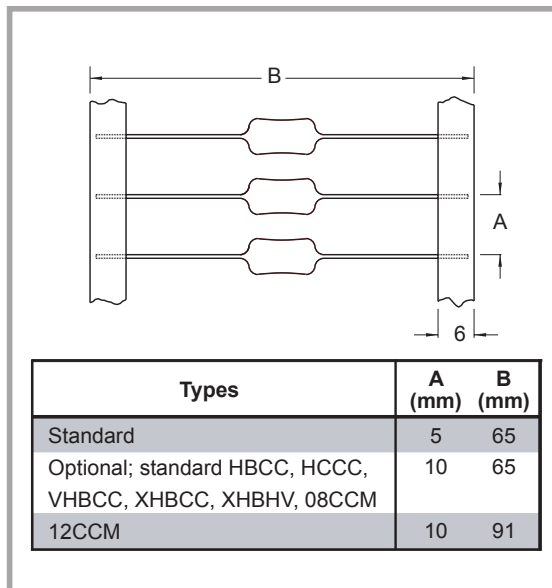
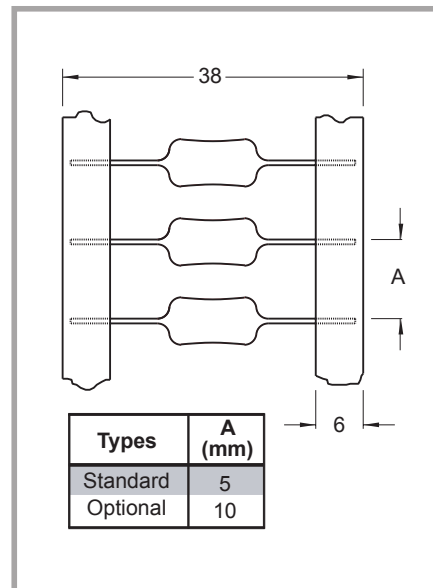


Fig. 4: Axial Narrow Taping (38mm)

Packing code : 11, 12



Packing Specification

Fig. 5: Radial Taping

Packing code : 31, 32

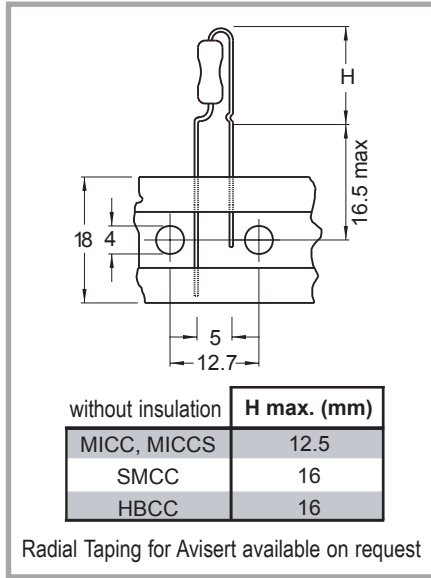


Fig. 6: Ammo pack, radial

Packing code : 32

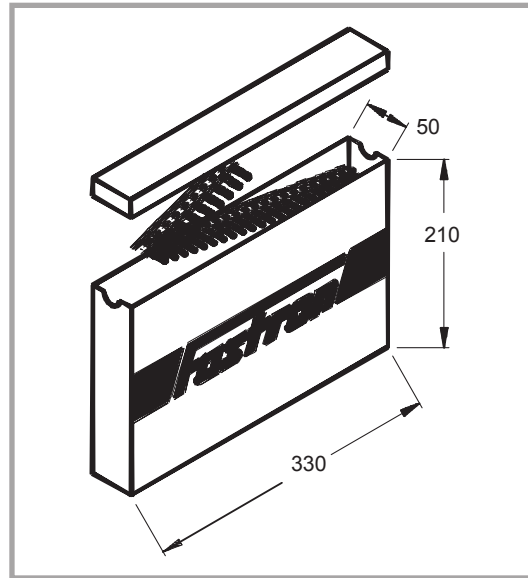
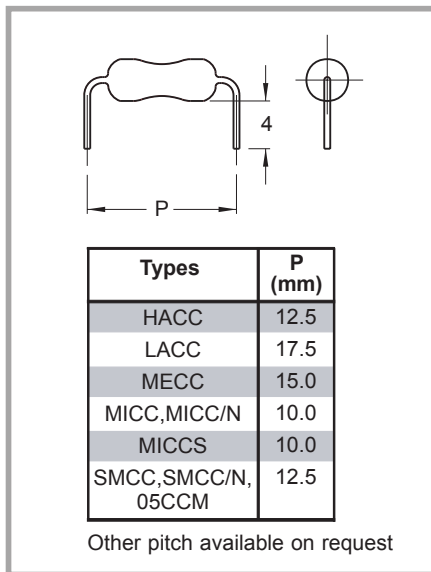


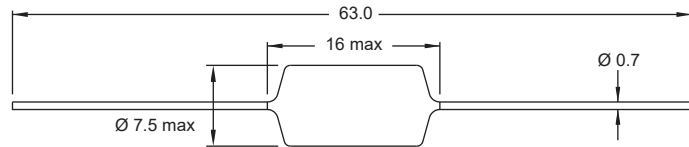
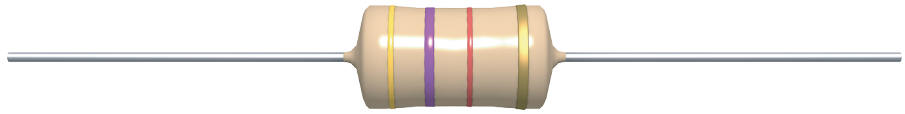
Fig. 7: Axial preformed

Packing code : 20



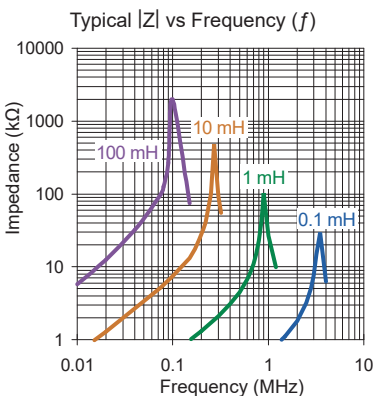
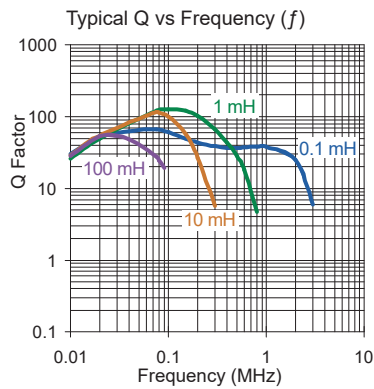
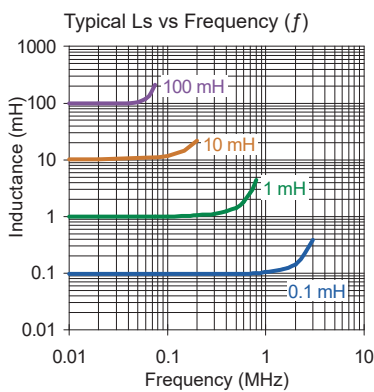
Packing Specification

XHBCC



(Fixed Choke Coils)

Leaded Inductors



Part No	Inductance L (μ H)	f_L (kHz)	Tol \pm (%)	Q min	f_Q (kHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)	
								I_1	I_{sat}
XHBCC-101K-YY	100	20	10	30	796	2.50	0.24	1620	1860
XHBCC-151K-YY	150	20	10	30	796	2.10	0.39	1260	1510
XHBCC-221K-YY	220	20	10	25	796	1.80	0.49	1120	1260
XHBCC-331K-YY	330	20	10	25	796	1.40	0.83	870	1030
XHBCC-471K-YY	470	20	10	25	796	1.10	1.40	655	875
XHBCC-681X-YY	680	20	5,10	65	252	1.00	1.80	590	715
XHBCC-102X-YY	1000	20	5,10	70	252	0.75	2.70	485	595
XHBCC-152X-YY	1500	20	5,10	60	252	0.60	4.40	375	485
XHBCC-172X-YY	1700	20	5,10	60	252	0.50	5.0	335	415
XHBCC-202X-YY	2000	20	5,10	60	252	0.51	5.2	345	435
XHBCC-222X-YY	2200	20	5,10	55	252	0.50	5.5	335	380
XHBCC-242X-YY	2400	20	5,10	55	252	0.49	5.6	330	380
XHBCC-252X-YY	2500	20	5,10	50	252	0.46	5.9	325	375
XHBCC-272X-YY	2700	20	5,10	50	252	0.45	6.1	320	360
XHBCC-302X-YY	3000	20	5,10	50	252	0.44	6.5	310	340
XHBCC-332X-YY	3300	20	5,10	45	252	0.42	7.2	295	320
XHBCC-352X-YY	3500	20	5,10	45	252	0.35	7.6	285	310
XHBCC-362X-YY	3600	20	5,10	45	252	0.34	7.9	280	305
XHBCC-452X-YY	4500	20	5,10	40	252	0.34	10	245	275
XHBCC-472X-YY	4700	20	5,10	40	252	0.34	12	230	270
XHBCC-532X-YY	5300	20	5,10	35	252	0.31	13	225	255
XHBCC-682X-YY	6800	20	5,10	95	79.6	0.23	16	195	225
XHBCC-103X-YY	10000	20	5,10	90	79.6	0.21	28	150	185
XHBCC-153X-YY	15000	20	5,10	90	79.6	0.19	35	130	155
XHBCC-223X-YY	22000	20	5,10	70	79.6	0.14	52	110	125
XHBCC-333X-YY	33000	20	5,10	30	79.6	0.10	80	90	105
XHBCC-473X-YY	47000	20	5,10	55	25	0.08	97	80	85
XHBCC-683X-YY	68000	20	5,10	55	25	0.07	150	65	70
XHBCC-104X-YY	100000	20	5,10	40	25	0.06	245	50	60

Core Material: Ferrite

Revision date: 31 May 2016

SPQ:

Packaging Form	Taped / Reel	Taped / Ammo pack
Axial	800 [-01]	300 [-02]

Remarks: I_1 & I_{sat} - see description in Technical Data.

Mouser Electronics

Authorized Distributor

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

Fastron:

[XHBCC-153J-01](#) [XHBCC-104J-01](#) [XHBCC-331K-01](#) [XHBCC-681J-01](#) [XHBCC-152J-01](#) [XHBCC-333J-01](#) [XHBCC-223J-01](#) [XHBCC-683J-01](#) [XHBCC-472J-01](#) [XHBCC-221K-01](#) [XHBCC-151K-01](#) [XHBCC-682J-01](#) [XHBCC-103J-01](#) [XHBCC-473J-01](#) [XHBCC-101K-01](#) [XHBCC-471K-01](#) [XHBCC-332J-01](#) [XHBCC-102J-01](#) [XHBCC-222J-01](#) [XHBCC-202J-02](#) [XHBCC-222J-02](#) [XHBCC-682J-02](#) [XHBCC-221K-02](#) [XHBCC-223J-02](#) [XHBCC-681J-02](#) [XHBCC-102J-02](#) [XHBCC-101K-02](#) [XHBCC-103J-02](#) [XHBCC-331K-02](#) [XHBCC-332J-02](#) [XHBCC-473J-02](#) [XHBCC-452J-02](#) [XHBCC-472J-02](#) [XHBCC-242J-02](#) [XHBCC-272J-02](#) [XHBCC-153J-02](#) [XHBCC-302J-02](#) [XHBCC-471K-02](#) [XHBCC-104J-02](#) [XHBCC-333J-02](#) [XHBCC-352J-02](#) [XHBCC-362J-02](#) [XHBCC-683J-02](#) [XHBCC-532J-02](#) [XHBCC-152J-02](#) [XHBCC-172J-02](#) [XHBCC-151K-02](#) [XHBCC-252J-02](#) [XHBCC-362J-01](#) [XHBCC-333K-01](#) [XHBCC-302J-01](#) [XHBCC-452K-01](#) [XHBCC-242J-01](#) [XHBCC-172K-02](#) [XHBCC-102K-02](#) [XHBCC-452K-02](#) [XHBCC-242K-01](#) [XHBCC-333K-02](#) [XHBCC-102K-01](#) [XHBCC-302K-01](#) [XHBCC-172J-01](#) [XHBCC-452J-01](#) [XHBCC-683K-01](#) [XHBCC-222K-02](#) [XHBCC-302K-02](#) [XHBCC-332K-01](#) [XHBCC-202K-02](#) [XHBCC-332K-02](#) [XHBCC-202J-01](#) [XHBCC-532K-01](#) [XHBCC-152K-02](#) [XHBCC-362K-02](#) [XHBCC-352J-01](#) [XHBCC-473K-02](#) [XHBCC-104K-01](#) [XHBCC-223K-01](#) [XHBCC-103K-02](#) [XHBCC-242K-02](#) [XHBCC-252K-01](#) [XHBCC-362K-01](#) [XHBCC-472K-01](#) [XHBCC-104K-02](#) [XHBCC-272J-01](#) [XHBCC-153K-02](#) [XHBCC-681K-01](#) [XHBCC-532J-01](#) [XHBCC-352K-02](#) [XHBCC-681K-02](#) [XHBCC-252J-01](#) [XHBCC-473K-01](#) [XHBCC-103K-01](#) [XHBCC-272K-01](#) [XHBCC-682K-02](#) [XHBCC-222K-01](#) [XHBCC-472K-02](#) [XHBCC-223K-02](#) [XHBCC-532K-02](#) [XHBCC-153K-01](#) [XHBCC-252K-02](#) [XHBCC-172K-01](#)