

Plugable Inductors (Pin Type Coils)

FASTRON plugable inductors offer a wide range of inductance values from 10 μ H to 150 000 μ H and a high Q. They come in shielded, tube and cap versions able to protect the winding. They are available in reel packing and ammpack.

Applications Applied in DC-DC converters and all types of electronic instruments, such as digital amplifier LPF and signal filtering applications.

Technical Data

L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency f_L
Q – Factor (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency f_Q
SRF (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer
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 Isat Current based on inductivity drop of 10% related to the unloaded inductivity
Operating Temperature	-55°C to +85°C
Recommended soldering method	Wave
Moisture Sensitivity Levels (MSL)	MSL Level 1, indicating unlimited floor life at $\leq 30^\circ\text{C}$ / 85% relative humidity
Solderability	Using lead free solder (Sn 99.9) at $260^\circ\text{C} \pm 5^\circ\text{C}$ for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to $260^\circ\text{C} \pm 5^\circ\text{C}$ for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at $23^\circ\text{C} \pm 5^\circ\text{C}$ 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: $+85^\circ\text{C}$ 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 $+85^\circ\text{C}$ 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 10N for 10 ± 1 seconds 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

Ordering Code Example: 09P-101X-YY

09P - **101** **X** - **YY** ➔ **09P-101K-51**
 (Model) (Inductance Value) (Tolerance) (Packing Code)

Core Type - Ferrite
 Tolerances - J (5%), K (10%), M (20%)
 Packing Code - 50 (Loose in Box), 51 (Reel)

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Packing
Specification

Reel Taping (51)

Fig 1

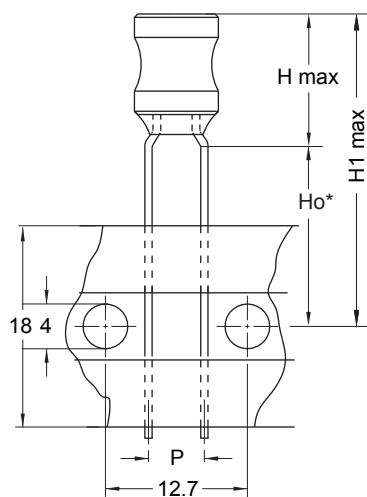


Fig 2

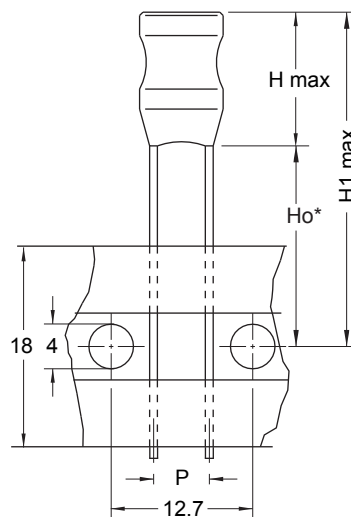


Fig 3

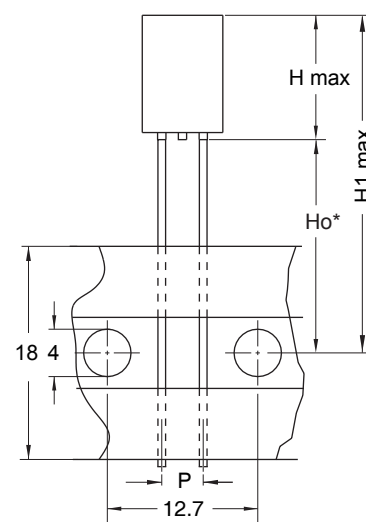


Fig 4

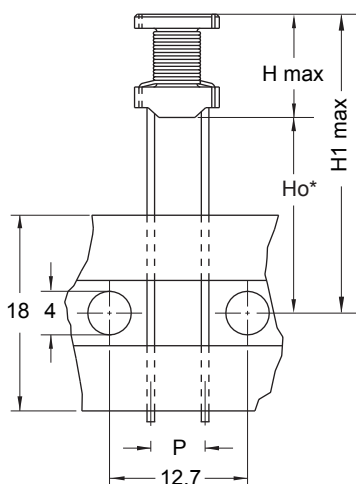
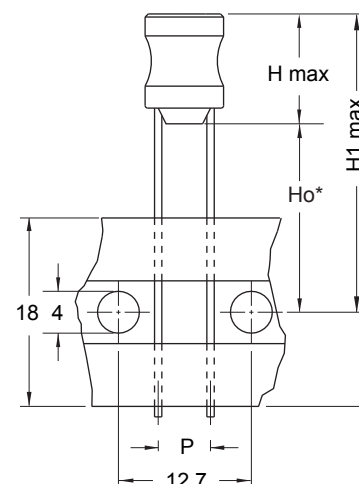


Fig 5



*according to IEC 286

Series	H max	Ho	H1 max	P	Fig
07P	12.5	16	28	5	1
07P/F	10.5	18	32.2	3.5	3
09P	13.5	18	32.2	5	2
09P/F	13.4	18	32.2	5	3
07HCP & 07HVP	10	18	32.2	5	4
07HCP/T	10.5	18	32.2	5	5