

◆ FEATURES

SMI-P chip inductors are 3L line of high current ferrite chip inductors. Minimized design that is suitable for portable electronic equipments requiring low profile.

● High Performance Characteristics

SMI-P chips exhibit low DC resistance and high current.

● Wide Inductance Range

SMI-P chip inductors cover a wide range of inductance values from 1.0 μ H to 10 μ H.

● High Reliability

SMI-P chip inductors have a monolithic inorganic material construction that effectively minimizes electromagnetic interference.

● High Soldering Heat Resistance

SMI-P chip inductors have high quality termination allowing both flow and reflow soldering methods to be used.

◆ APPLICATIONS

SMI chip inductors can be used in a variety of electronics including:

- Mobile phones
- DSC
- MP3 Player
- LCD / DVR
- Bluetooth
- Portable digital equipment

◆ PRODUCT IDENTIFICATION

SMI – 252010 P – 1R0 M
 (1) (2) (3) (4) (5)

(1).Product Code

(2).Dimensions(in mm)

(3).P : For high current

(4).Inductance Code

(5).Tolerance Code

Code	Tolerance
M	$\pm 20\%$
N	$\pm 30\%$

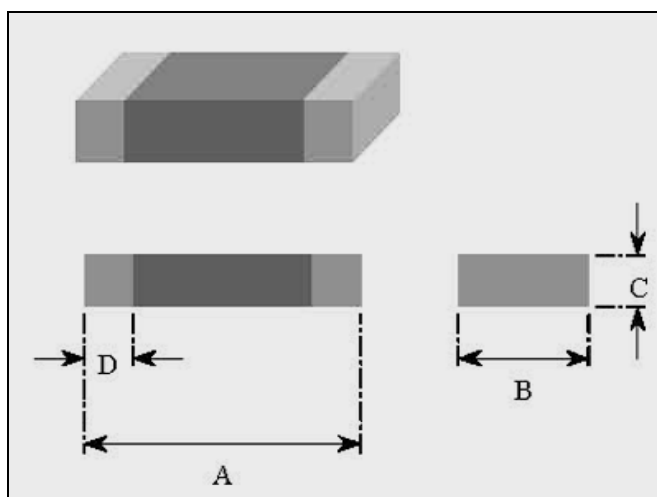
◆ **OPERATING TEMPERATURE:** -40 ~ 85°C

◆ **TEST EQUIPMENTS AND TEST SETUP**

L&Q&SRF by Agilent E4991A RF Impedance Analyzer with HP16197A Test Fixture.

DCR by milli-ohm meter.

◆ PRODUCT DIMENSIONS



PRODUCT NO.	A	B	C	D
SMI-201610P	2.0 $\pm$ 0.20	1.6 $\pm$ 0.20	1.0MAX	0.5 $\pm$ 0.20
SMI-252010P	2.5 $\pm$ 0.20	2.0 $\pm$ 0.20	1.0 $\pm$ 0.20	0.5 $\pm$ 0.20
SMI-322510P	3.2 $\pm$ 0.20	2.5 $\pm$ 0.20	1.0 $\pm$ 0.20	0.5 $\pm$ 0.30

NOTE:Dimensions in mm

◆ PRODUCT SPECIFICATIONS

Part Number	Inductance (μ H)	Q TYP	TEST FREQ. (MHz)	R _{DC} (m Ω) $\pm 20\%$	Current (mA) Max. $\Delta L/L_o: 30\%$
SMI-252010P-1R0M	1.0	15	1	290	1200
SMI-252010P-2R2M	2.2	19	1	430	1000
SMI-252010P-3R3M	3.3	23	1	520	950
SMI-252010P-4R7M	4.7	26	1	650	850
SMI-252010P-6R8M	6.8	30	1	790	600
SMI-252010P-100M	10.0	35	1	740	350
SMI-322510P-2R2M	2.2	23	1	300	1300
SMI-322510P-3R3M	3.3	25	1	380	1060
SMI-322510P-4R7M	4.7	28	1	450	850
SMI-322510P-6R8M	6.8	30	1	520	680
SMI-322510P-100M	10.0	35	1	640	510

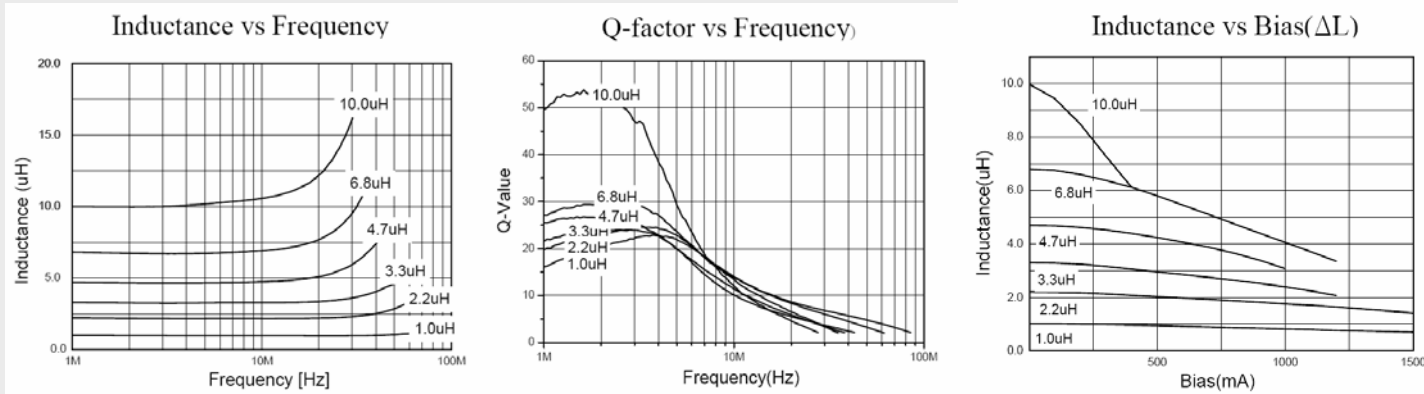
◆ PRODUCT SPECIFICATIONS

Part Number	Inductance (μ H)	TEST FREQ. (MHz)	R _{DC} (m Ω) $\pm 30\%$	Current (mA) Max. $\Delta T/T_o: 40^\circ\text{C}$
SMI-201610P-1R2N	1.2	1	100	1400
SMI-201610P-2R2N	2.2	1	120	1300
SMI-201610P-3R3N	3.3	1	140	1200
SMI-201610P-4R7N	4.7	1	160	1100

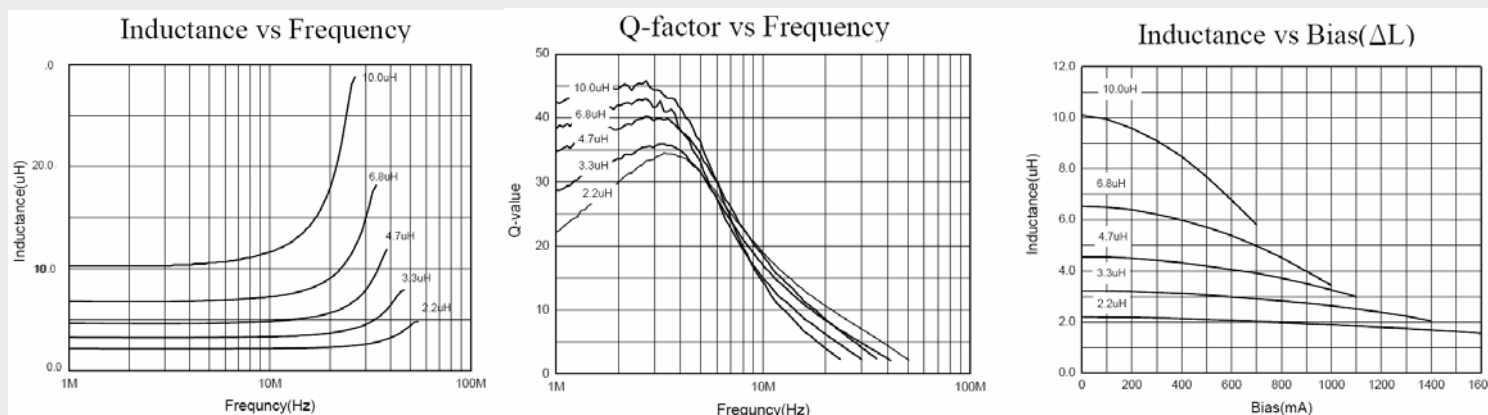
The maximum DC current having inductance decrease within $\Delta L = 30\%$ and temperature to rise becomes $\Delta T = 40^\circ\text{C}$, whichever is lower. (Reference ambient temperature 20°C)

◆ **TYPICAL ELECTRICAL CHARACTERISTIC CURVES**

SMI-252010P



SMI-322510P



SMI-201610P

