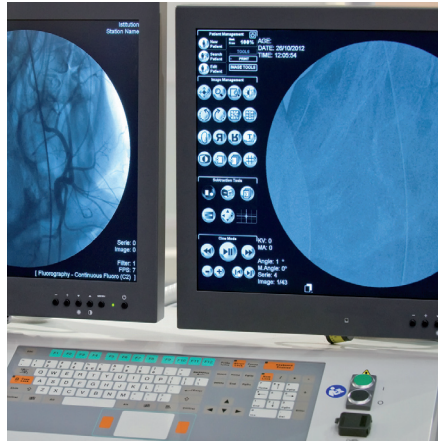


HIGHLY CONSTANT SMT CERAMIC RF COILS

SERIES 5120 (5387)



SUMIDA Components GmbH is a well-known manufacturer of RF electronic components. Within our product program, we offer standard platforms as well as custom solutions designed and manufactured with the highest level of quality. This results in robust and reliable components for our customers demanding applications. Our extensive manufacturing and testing capabilities

coupled with our IATF 16949, DIN EN ISO 9001, DIN EN ISO 14001 and DIN EN ISO 50001 certifications, makes SUMIDA Components GmbH the right choice to satisfy your high requirements. SUMIDA Components GmbH also possesses certified testing facilities in Asia and Europe to perform comprehensive laboratory testing services for electronic components.

GENERAL CHARACTERISTICS OF HIGHLY CONSTANT SMT CERAMIC RF COILS

DESCRIPTION

These SMT RF Coils are inductive components with a fixed highly constant inductance. The burnt-in and galvanically strengthened silver windings are firmly fixed to the ceramic body. The very low temperature constant of the ceramic body results in a constantly low temperature coefficient of

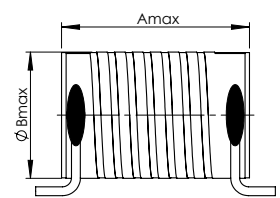
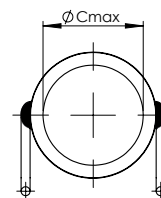
the coil inductances. They are mainly used in the field of signal processing for frequency modulation, such as LC resonant circuits, low-pass or high-pass filter in electrical and electronic equipment.

FEATURES

- Highly Constant (Temp. Coefficient)
- Operating Temperature Range
-55 °C to +125 °C
- Tight Tolerances (e.g. 1 %)
- Non Magnetic
- Low RDC
- High Q-Factor
- Several Sizes

APPLICATIONS

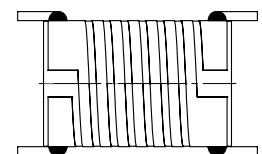
- Medical Equipment
- Measurement Equipment
- X-Ray Analytics



Size	A	B	C
0	12.2	5.3	2.8
I	16.4	7.0	4.6
II	19.5	9.4	7.0
III	21.5	14.2	10.8
IV	34.8	14.2	10.8

All dimensions in [mm]

Different SMD variations available

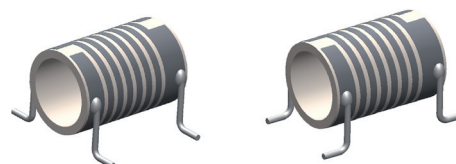


HIGHLY CONSTANT SMT CERAMIC RF COILS

SERIES 5120 (5387)

TECHNICAL DATA

Inductance	12 nH - 2660 nH
Tolerance of Inductance	1 %, 2 %, 5 %, 10 %
Average Coeff. of linear expansion at 30 °C - 300 °C according to DIN60642-3	$7 - 9 \times 10^{-6}/K$



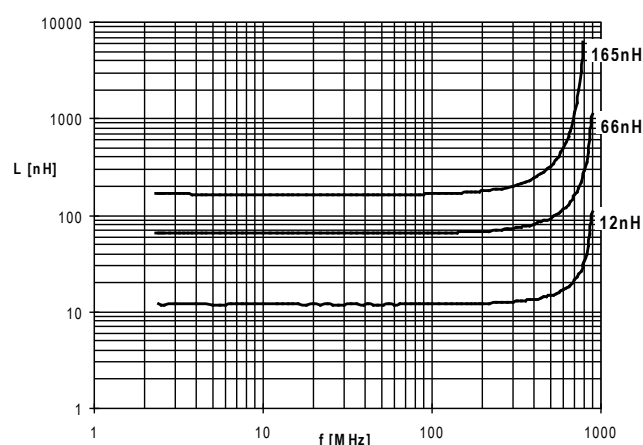
CONSRUCTIVE DATA

Ceramic body	C-221 DIN VDE0335
Silver windings	burnt-in and galvanically strengthened
Terminals	copper tinned
Pick-off terminals	on request
Marking	inductance value L in nH L-tolerance in code letters (K for $\pm 10\%$, J for $\pm 5\%$, G for $\pm 2\%$ and F for $\pm 1\%$)
Dimensions	Size 0 / I / II / III / IV *

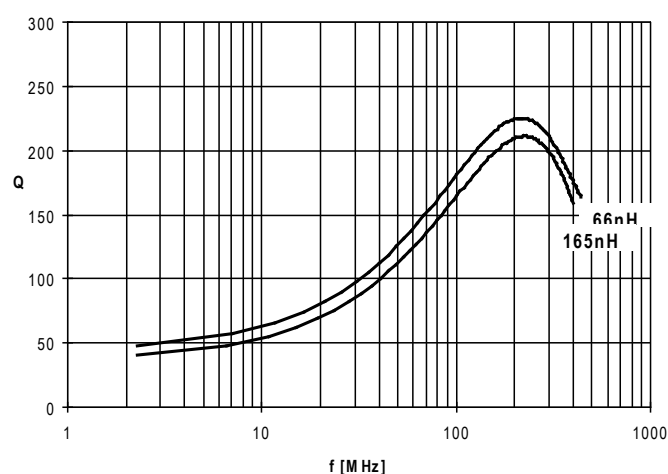
* see front page

DIAGRAM EXAMPLE FOR SIZE 0

Inductance L vs. Frequency f



typ. Quality Q vs. Frequency f



QUALITY MANAGEMENT SYSTEM

Certified QM-System:
IATF 16949
DIN EN ISO 9001

Certified EM-System:
DIN EN ISO 14001
DIN EN ISO 50001