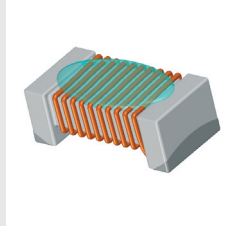
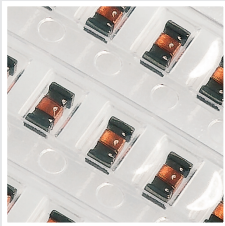
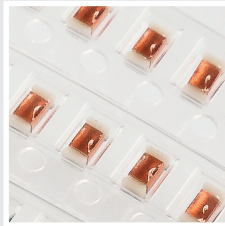
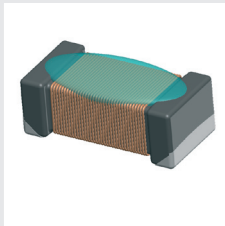


SMT Chipinduktivitäten  
*SMT Chip Inductors*

RoHS  
compliant

Baugröße / *Size* 1206 (3216)  
Serie / *Series* 5403, 5503



## Allgemeine Eigenschaften und technische Informationen zu den drahtgewickelten SMD-Spulen Baugröße 1206 / Serie 5403, 5503

## General Characteristics and Technical Information of wire-wound SMD Inductors Size 1206 / Series 5403, 5503

Die Baugröße 1206 ist in zwei verschiedenen Metallisierungen erhältlich und für die Pad Layouts 1206 und 1210 geeignet.

The Size 1206 is available in two various metallizations and is suitable for pad layouts 1206 and 1210.

	Symbol Symbol	Kernmaterial / Core Material	
		Keramik / Ceramic	Ferrit / Ferrite
Induktivität Inductance	L	3,3 ... 1200 nH	1,5 ... 18 µH
Toleranz Tolerance	-	2/5/10/20 % <sup>1)</sup>	2/5/10/20 % <sup>1)</sup>
Minimale Güte Minimum Q-factor	Q <sub>min</sub>	30 ... 45	25 ... 16
Eigenresonanzfrequenz Self resonance frequency	f <sub>res, min</sub>	> 5000 ... 430 MHz	260 ... 95 MHz
Max. Gleichstromwiderstand Max. DC resistance	R <sub>DC, max</sub>	40 ... 3200 mΩ	1200 ... 9000 mΩ
Nennstrom (bez. auf 85 °C) Nominal Current (ref. To 85 °C)	I <sub>N</sub>	1000 ... 220 mA <sup>2)</sup>	320 ... 130 mA <sup>2)</sup>
Zulässiger Betriebstemperaturbereich permissible operating temperature range	-	- 55 ... 125° C	

<sup>1)</sup> Standard-Toleranzen - engere Toleranzen auf Anfrage  
Standard tolerances - tighter tolerances on request

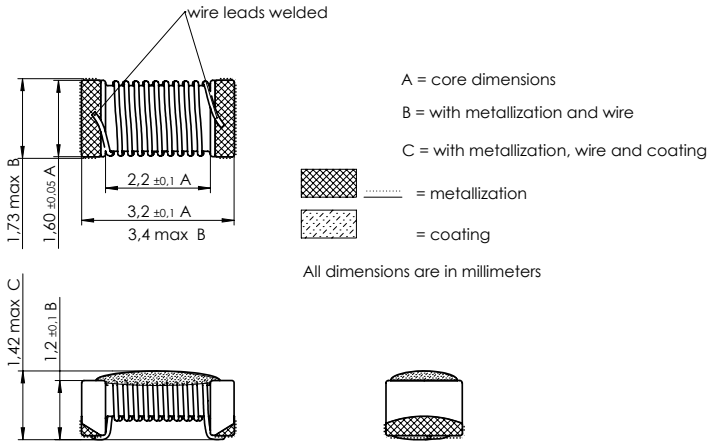
<sup>2)</sup> Nennstrom (max) bis 85° C Umgebungstemperatur  
maximum rated current at ambient temperature 85° C

Technische Informationen  
 Baugröße 1206 / Serie 5403, 5503  
 drahtgewickelt

Technical Details  
 Size 1206 / Series 5403, 5503  
 wire-wound

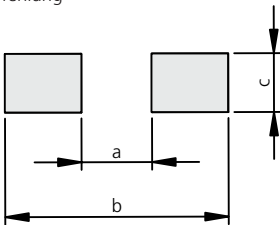
Bauteilabmessungen

Component Dimensions



Pad-Layout Empfehlung

Pad-Layout recommendation



a	b	c
2,0 ... 2,2	3,8 ... 4,2	1,6 ... 2,0

Maße / Dimensions [mm]

Elektrische Eigenschaften  
Baugröße 1206 / Serie 5403, 5503  
drahtgewickelt

*Electrical Characteristics*  
*Size 1206 / Series 5403, 5503*  
*wire-wound*

Artikel-Nr.	L	Qmin	fL,Q	fres,min	RDC,max	IN,max	Tol.
Order No.	[nH]		[MHz]	[MHz]	[mΩ]	[mA]	[%]
5*03 030 *4 **	3,3	30	100	>5000	40	1000	10/20
5*03 060 *4 **	6,8	30	100	>5000	50	1000	10/20
5*03 120 *4 **	12	30	100	4000	80	1000	10/20
5*03 150 *4 **	15	30	100	3200	80	1000	10/20
5*03 180 *4 **	18	35	100	2800	80	1000	2/5/10/20
5*03 220 *4 **	22	35	100	2300	100	1000	2/5/10/20
5*03 270 *4 **	27	40	100	2000	110	1000	2/5/10/20
5*03 330 *4 **	33	40	100	1900	110	1000	2/5/10/20
5*03 390 *4 **	39	40	100	1800	130	1000	2/5/10/20
5*03 470 *4 **	47	40	100	1400	130	1000	2/5/10/20
5*03 560 *4 **	56	35	100	1400	230	840	2/5/10/20
5*03 680 *4 **	68	40	100	1300	230	570	2/5/10/20
5*03 820 *4 **	82	40	100	1200	210	660	2/5/10/20
5*03 101 *4 **	100	40	100	1100	230	660	2/5/10/20
5*03 121 *4 **	120	40	100	1000	290	570	2/5/10/20
5*03 151 *4 **	150	45	100	970	300	530	2/5/10/20
5*03 181 *4 **	180	35	50	880	400	450	2/5/10/20
5*03 221 *4 **	220	35	50	850	470	430	2/5/10/20
5*03 271 *4 **	270	35	50	800	500	420	2/5/10/20
5*03 331 *4 **	330	35	50	710	620	410	2/5/10/20
5*03 391 *4 **	390	35	50	650	820	410	2/5/10/20
5*03 471 *4 **	470	35	50	640	1100	290	2/5/10/20
5*03 561 *4 **	560	30	35	560	1300	280	2/5/10/20
5*03 681 *4 **	680	30	35	540	1500	270	2/5/10/20
5*03 821 *4 **	820	30	35	470	1800	260	2/5/10/20
5*03 102 *4 **	1000	30	35	450	2800	230	2/5/10/20
5*03 122 *4 **	1200	30	35	430	3200	220	2/5/10/20
5*03 152 *4 **	1500	25	7,9	260	1200	320	2/5/10/20
5*03 182 *4 **	1800	25	7,9	250	1200	320	2/5/10/20
5*03 222 *4 **	2200	25	7,9	240	1300	300	2/5/10/20
5*03 272 *4 **	2700	25	7,9	230	1400	300	2/5/10/20
5*03 332 *4 **	3300	25	7,9	200	1500	280	2/5/10/20
5*03 392 *4 **	3900	25	7,9	190	1900	280	2/5/10/20
5*03 472 *4 **	4700	25	7,9	170	2200	280	2/5/10/20
5*03 562 *4 **	5600	25	7,9	160	2400	260	2/5/10/20
5*03 682 *4 **	6800	25	7,9	150	2800	240	2/5/10/20
5*03 822 *4 **	8200	25	7,9	130	3100	220	2/5/10/20
5*03 103 *4 **	10000	25	7,9	120	4000	200	2/5/10/20
5*03 123 *4 **	12000	18	2,5	110	4600	200	2/5/10/20
5*03 153 *4 **	15000	16	2,5	100	8200	160	2/5/10/20
5*03 183 *4 **	18000	16	2,5	95	9000	130	2/5/10/20

Keramik / Ceramics

Keramik / Ceramics

Ferrit / Ferrite

Ferrit / Ferrite

Musterkasten Bestellnummer: 5\*03 000 01 00  
Bestückt mit je 10 Stück der gängigsten Typen.

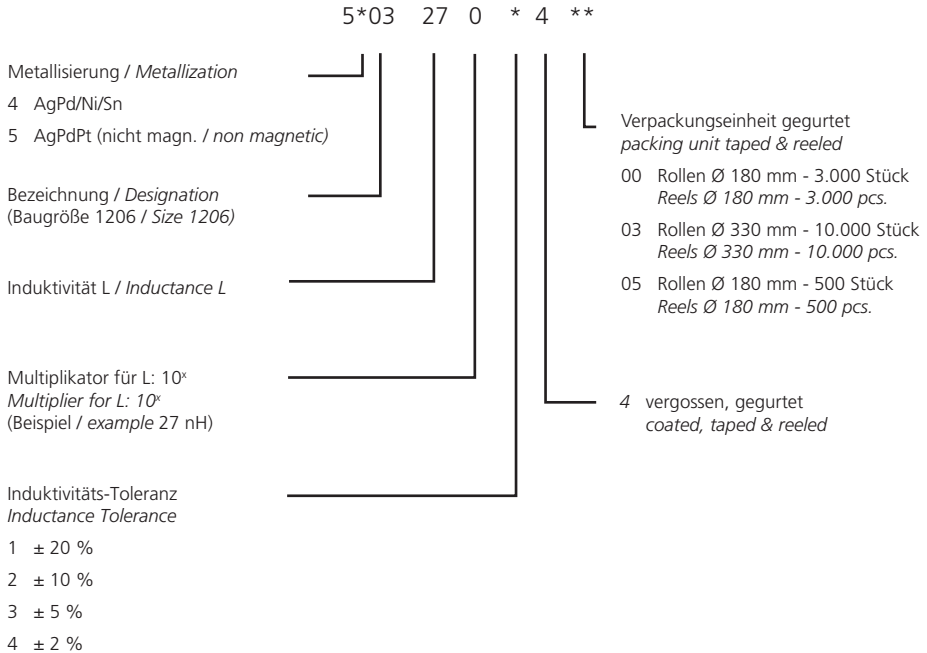
*Sample Kit Part Number: 5\*03 000 01 00*  
*Contains a selection - 10 pcs. each of various types.*

**Bestellhinweise**  
**Baugröße 1206 / Serie 5403, 5503**  
**drahtgewickelt**

**Ordering Instructions**  
**Size 1206 / Series 5403, 5503**  
**wire-wound**

Erklärung des Artikelnummern-Schlüssels

Explanation of Part Code



**Bestellbeispiel / Ordering examples:**

Chipspule / Chip Coil 1206, 270 nH, Tol. 5 %, Metallisierung / Metallization AgPd/Ni/Sn, vergossen, gegurtet (3.000 Stück) / coated, taped & reeled (3.000 pcs.) = **5403 271 34 00**

Chipspule / Chip Coil 1206, 18000 nH, Tol. 10 %, Metallisierung / Metallization AgPdPt, vergossen, gegurtet (10.000 Stück) / coated, taped & reeled (10.000 pcs.) = **5503 183 24 03**

Elektrische Eigenschaften  
 Baugröße 1206 / Serie 5403, 5503  
 drahtgewickelt

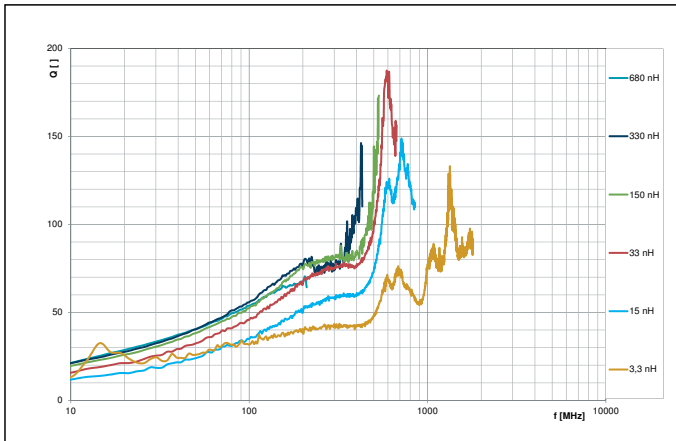
*Electrical Characteristics*  
*Size 1206 / Series 5403, 5503*  
*wire-wound*

Spule auf Keramikkörper

*Coil on ceramic body*

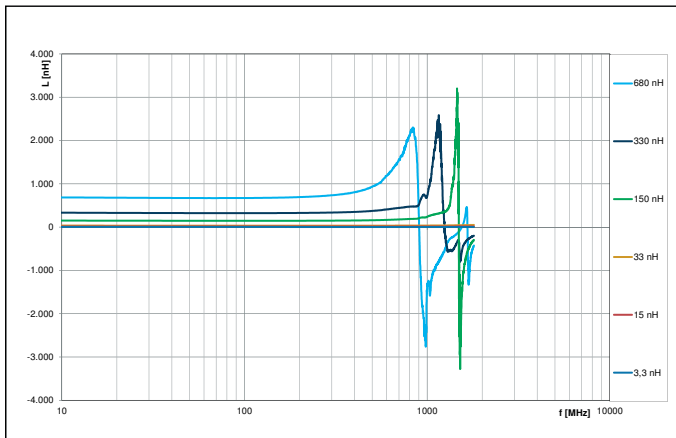
Güte Q über Frequenz f

*Q-Factor vs. Frequency f*



Induktivität L über Frequenz f

*Inductance L vs. Frequency f*



**Elektrische Eigenschaften**  
**Baugröße 1206 / Serie 5403, 5503**  
**drahtgewickelt**

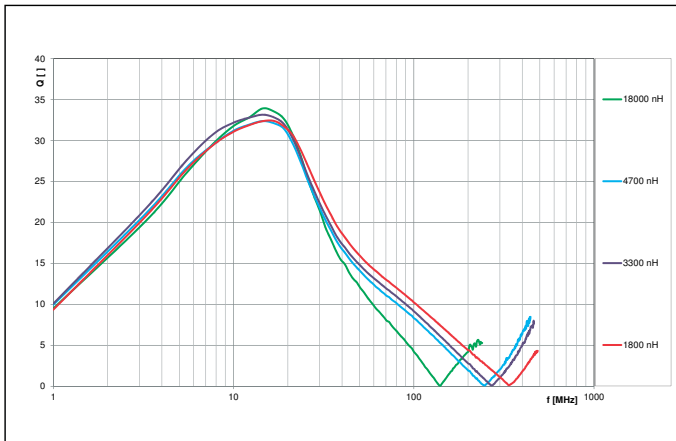
*Electrical Characteristics*  
*Size 1206 / Series 5403, 5503*  
*wire-wound*

**Spule auf Ferritkörper**

*Coil on ferrite body*

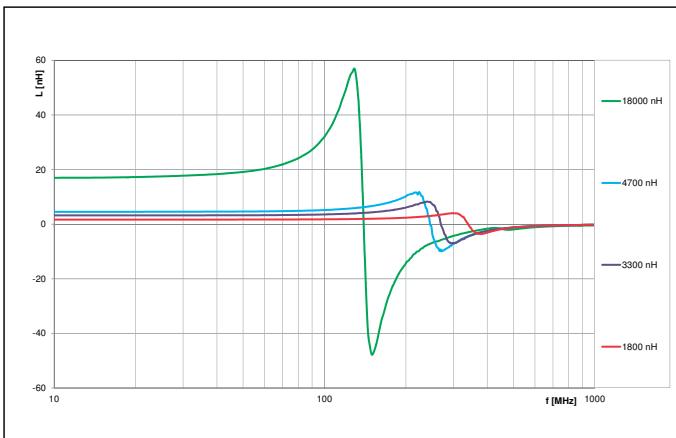
Güte Q über Frequenz f

*Q-Factor vs. Frequency f*



Induktivität L über Frequenz f

*Inductance L vs. Frequency f*



**Elektrische Eigenschaften**  
**Baugröße 1206 / Serie 5403, 5503**  
**drahtgewickelt**

*Electrical Characteristics*  
*Size 1206 / Series 5403,5503*  
*wire-wound*

Empfohlene Strombelastbarkeit  $I_b / I_{N, 85^\circ\text{C}}$   
 in Abhängigkeit von der Umgebungstemperatur  $T_a$

*Recommended Current-carrying capacity  $I_{op} / I_{R, 85^\circ\text{C}}$*   
*depending on the ambient temperature  $T_a$*

