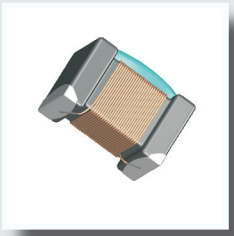
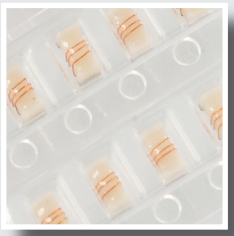
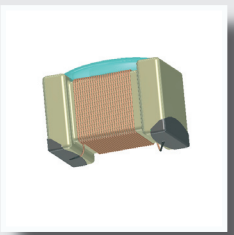
HR-Serie SMT Chipinduktivitäten
HR-Series SMT Chip Inductors

RoHS
compliant

Baugröße / *Size* 0805 (2012)
Serie / *Series 54X8, 55X8*



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Technische Informationen
Baugröße 0805
HR SMT Serie 54X8, 55X8

Technical Details
Size 0805
HR SMT Series 54X8, 55X8

	Symbol *Symbol*	Kernmaterial / Core *Material*	
		Keramik / *Ceramic*	*Ferrit / Ferrite*
Induktivität *Inductance*	L	2,7 ... 560 nH	680 ... 3900 nH
Toleranz *Tolerance*	-	2/5/10/20 % [1]	5/10/20 % [1]
Minimale Güte *Minimum Q-factor*	Q_{min}	20 ... 50	20
Eigenresonanzfrequenz *Self resonance frequency*	$f_{res\ ,\ min}$	> 6000 ... 600 MHz	450 ... 150 MHz
Max. Gleichstromwiderstand *Max. DC resistance*	$R_{DC,\ max}$	30 ... 3200 mΩ	500 ... 3600 mΩ
Nennstrom (bez. auf 85 °C) *Nominal Current (ref. To 85 °C)*	I_N	1000 ... 100 mA [2]	250 ... 95 mA [2]
Zulässiger Betriebstemperaturbereich *permissable operating temperature range*			
vergossen / *with coating*	-	- 55 ... 125 ° C	
unvergossen / *without coating*	-	- 55 ... 180 ° C (L > 15 nH)	

[1] Standard-Toleranzen - engere Toleranzen auf Anfrage
Standard tolerances - tighter tolerances on request

[2] Nennstrom (max) bis 85° C Umgebungstemperatur
maximum rated current at ambient temperature 85° C

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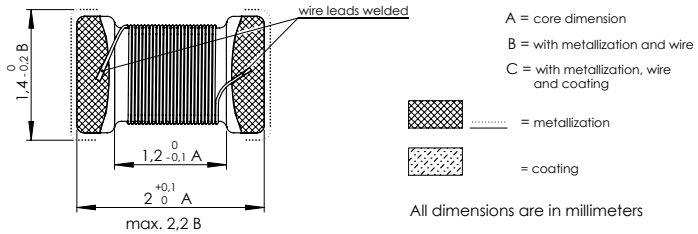
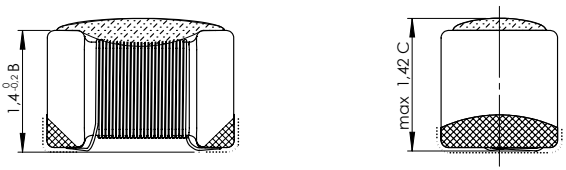
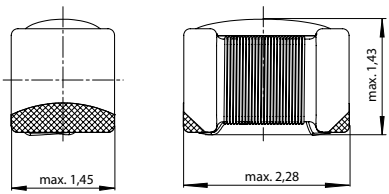
Bauteilabmessungen

Component Dimensions

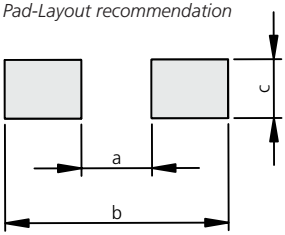




Bauteilabmessungen nach dem Nachverzinnen
Dimensions after tinning



Pad-Layout Empfehlung
Pad-Layout recommendation



a	b	c
1,0 ... 1,2	2,8 ... 3,2	1,2 ... 1,5

Maße / *Dimensions* [mm]

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Elektrische Eigenschaften
Baugröße 0805
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Electrical Characteristics
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HR SMT Series 54X8, 55X8

Artikel-Nr. *Order No.*	L	Q_{min}	Q_{typ}	$f_{L,Q}$	$f_{res,min}$	$R_{DC,max}$	$I_{N,max}$	Tol.
	[nH]		@ 800 MHz	[MHz]	[MHz]	[m]	[mA]	[%]
5**8 020 ** **	2,7	20	50	250	6000	30	1000	20
5**8 050 ** **	5,6	25	60	250	6000	40	900	10/20
5**8 060 ** **	6,8	30	70	250	5500	50	800	10/20
5**8 080 ** **	8,2	35	75	250	5000	60	700	20
5**8 100 ** **	10	40	80	250	4500	60	700	5/10/20
5**8 120 ** **	12	40	85	250	4000	60	700	5/10/20
5**8 150 ** **	15	40	85	250	3500	70	670	5/10/20
5**8 180 ** **	18	45	90	250	3300	70	670	5/10/20
5**8 220 ** **	22	45	85	250	2600	90	600	5/10/20
5**8 270 ** **	27	50	90	250	2500	90	600	5/10/20
5**8 330 ** **	33	45	80	250	2150	120	520	5/10/20
5**8 390 ** **	39	50	90	250	2050	100	560	5/10/20
5**8 470 ** **	47	45	85	200	1900	130	500	2/5/10/20
5**8 560 ** **	56	45	60	200	1700	140	480	2/5/10/20
5**8 680 ** **	68	45	60	200	1550	190	410	2/5/10/20
5**8 820 ** **	82	40	60	150	1430	210	390	2/5/10/20
5**8 101 ** **	100	40	50	150	1310	260	350	2/5/10/20
5**8 121 ** **	120	40	45	150	1210	440	270	2/5/10/20
5**8 151 ** **	150	35	40	100	1120	440	270	2/5/10/20
5**8 181 ** **	180	35	30	100	1030	470	260	2/5/10/20
5**8 221 ** **	220	35	-	100	950	550	240	2/5/10/20
5**8 271 ** **	270	35	-	100	870	1000	180	2/5/10/20
5**8 331 ** **	330	35	-	100	800	1000	180	2/5/10/20
5**8 391 ** **	390	35	-	100	730	1900	130	2/5/10/20
5**8 471 ** **	470	35	-	100	660	2400	115	2/5/10/20
5**8 561 ** **	560	35	-	100	600	3200	100	2/5/10/20
5**8 681 ** **	680	20	-	25,2	450	500	250	5/10/20
5**8 821 ** **	820	20	-	25,2	400	550	240	5/10/20
5**8 102 ** **	1000	20	-	7,96	350	500	250	5/10/20
5**8 122 ** **	1200	20	-	7,96	300	650	220	5/10/20
5**8 152 ** **	1500	20	-	7,96	250	750	200	5/10/20
5**8 182 ** **	1800	20	-	7,96	250	850	190	5/10/20
5**8 222 ** **	2200	20	-	7.96	200	1700	130	5/10/20
5**8 272 ** **	2700	20	-	7,96	200	2000	120	5/10/20
5**8 332 ** **	3300	20	-	7,96	200	3300	100	5/10/20
5**8 392 ** **	3900	20	-	7.96	150	3600	95	5/10/20

Keramik / *Ceramic*

Ferrit / *Ferrite*

Musterkasten auf Anfrage / Sample Kit on request

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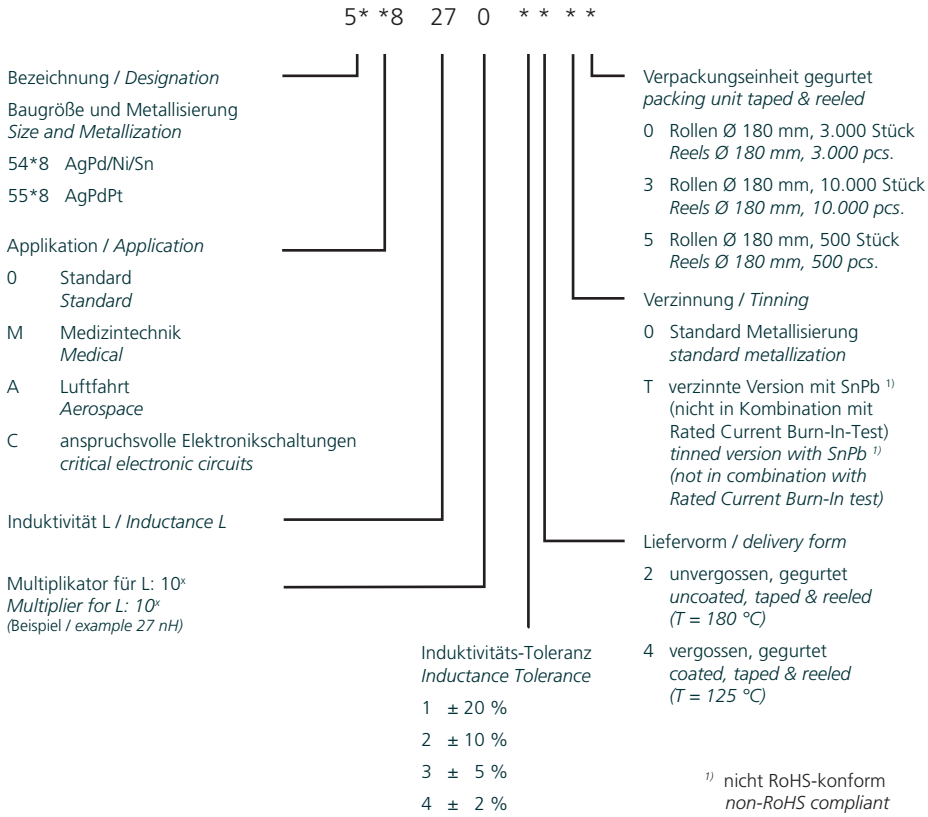
Bestellhinweise
Baugröße 0805
HR SMT Serie 54X8, 55X8

Ordering Instructions
Size 0805
HR SMT Series 54X8, 55X8

Erklärung des Artikelnummern-Schlüssels

Explanation of Part Code



Bestellbeispiele / *Ordering examples:*

Chipspule 0805, Medizintechnik, L = 270 nH, Tol. 2 %,
vergossen (T = 125 °C), gegurtet 10.000 Stück
Chip Coil 0805, medical, L = 270 nH, Tol. 2 %,
coated (T = 125 °C), taped & reeled 10.000 pcs. **= 54M8 271 44 03**

Chipspule 0805, Luftfahrt, L = 1,8 nH, Tol. 10 %,
unvergossen (T = 180 °C), verzinnte Version (SnPb), gegurtet 3.000 Stück
Chip Coil 0805, aerospace, L = 1,8 nH, Tol. 10 %,
uncoated (T = 180 °C), tinned version (SnPb), taped & reeled 3.000 pcs. **= 54A8 182 22 T0**

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Electrical Characteristics
Size 0805
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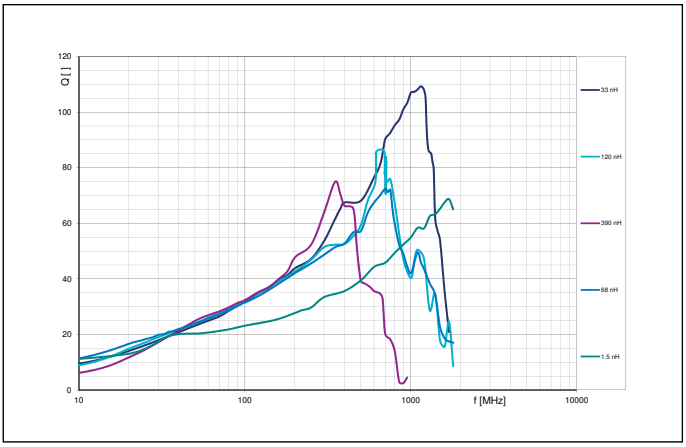
Spule auf Keramikkörper

Coil on ceramic body

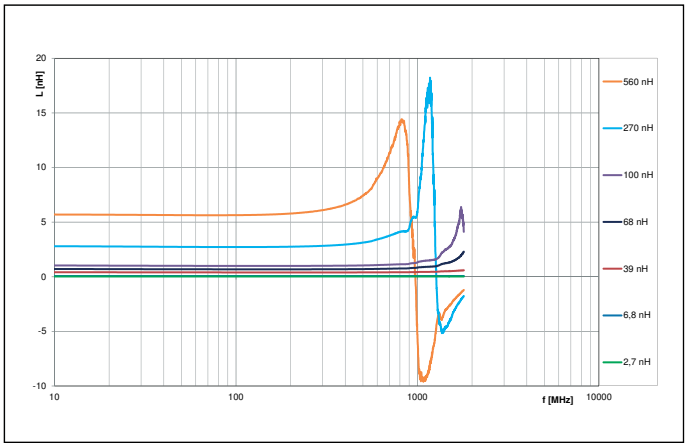
Güte Q über Frequenz f

Q-Factor vs. Frequency f



Induktivität L über Frequenz f

Inductance L vs. Frequency f



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Elektrische Eigenschaften
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Size 0805
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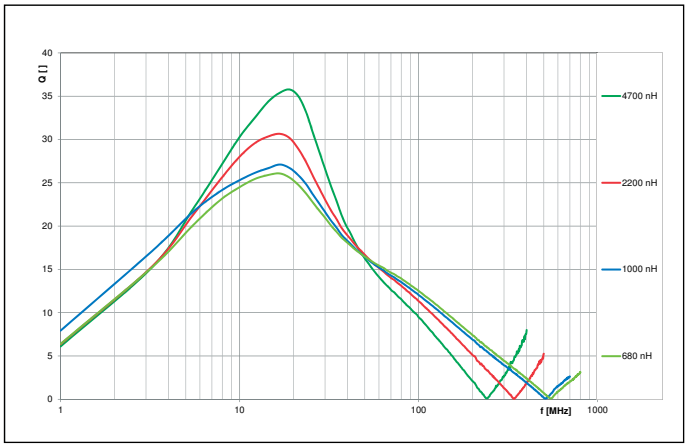
Spule auf Ferritkörper

Coil on ferrite body

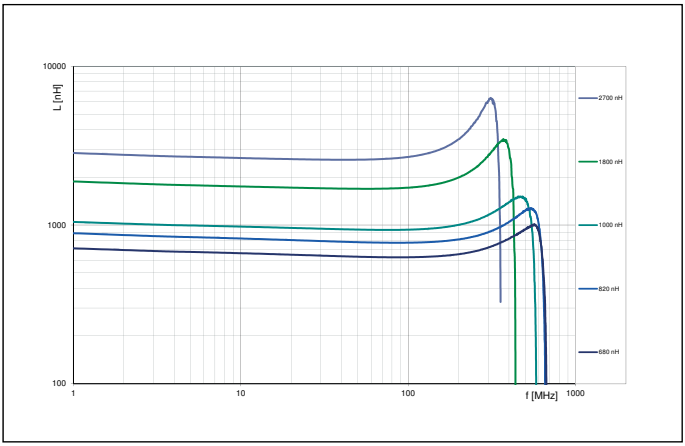
Güte Q über Frequenz f

Q-Factor vs. Frequency f



Induktivität L über Frequenz f

Inductance L vs. Frequency f



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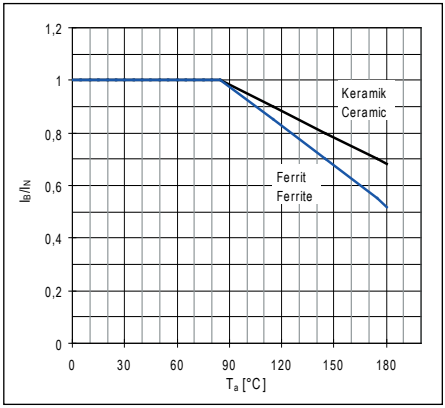
Empfohlene Strombelastbarkeit $I_B / I_{N,\,85\,°C}$ in Abhängigkeit von der Umgebungstemperaur T_a

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



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