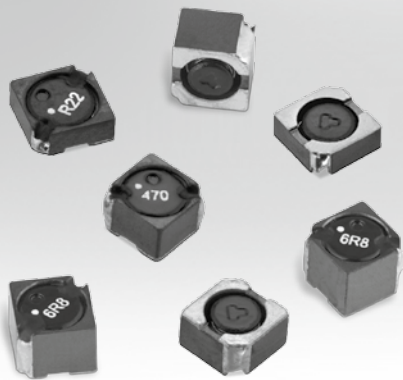


WE-SPC

SMD Power Inductor

Size 4818



Characteristics

- Extremely small size
- High saturation current, up to 9.5 A
- Magnetic shielded, which results in a low leakage field
- High self resonance frequency
- Low self-losses
- Optimize solderability characteristics
- Operating temperature: $-40\text{ }^{\circ}\text{C}$ up to $+125\text{ }^{\circ}\text{C}$

Applications

- Portable power devices
- DC/DC converter
- PCMCIA card
- Smart phone
- PDA
- Digital camera

QR-Code



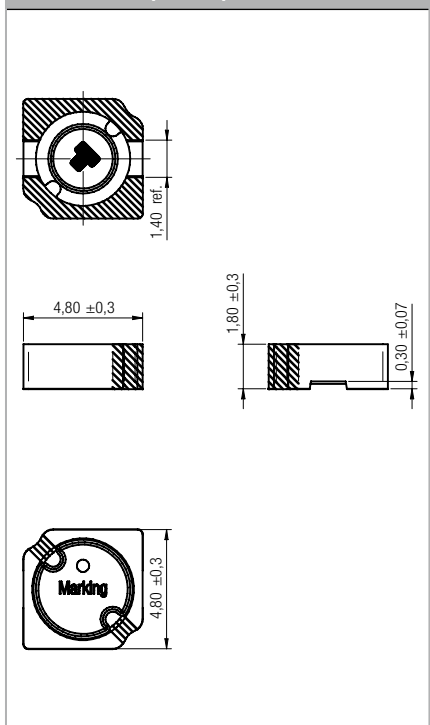
Electrical properties

Order Code	L (μH)	Tolerance (%)	I_R (A)	I_{sat} (A)	$R_{DC\ typ.}$ (Ω)	$R_{DC\ max.}$ (Ω)	f_{res} (MHz)	VPE
744 089 410 022	0.22	± 30	4.50	9.50	0.0127	0.0150	230	500
744 089 410 043	0.43	± 30	3.80	8.00	0.0149	0.0176	160	
744 089 410 068	0.68	± 30	3.40	6.50	0.0187	0.0221	120	
744 089 410 10	1.0	± 20	3.00	5.40	0.025	0.0295	100	
744 089 410 22	2.2	± 20	2.10	3.60	0.056	0.0661	65	
744 089 410 29	2.9	± 20	1.55	3.00	0.085	0.101	55	
744 089 410 35	3.5	± 20	1.50	2.80	0.095	0.113	52	
744 089 410 50	5.0	± 20	1.40	2.50	0.117	0.140	43	
744 089 410 68	6.8	± 20	1.10	2.10	0.160	0.190	40	
744 089 410 78	7.8	± 20	1.05	1.90	0.195	0.230	35	
744 089 410 89	8.9	± 20	0.95	1.70	0.203	0.240	33	
744 089 411 00	10	± 20	0.90	1.60	0.210	0.248	33	
744 089 411 50	15	± 20	0.75	1.35	0.365	0.430	24	
744 089 412 20	22	± 20	0.65	1.10	0.465	0.549	20	
744 089 413 30	33	± 20	0.45	0.90	0.860	1.015	15	
744 089 414 70	47	± 20	0.40	0.75	0.960	1.133	14	

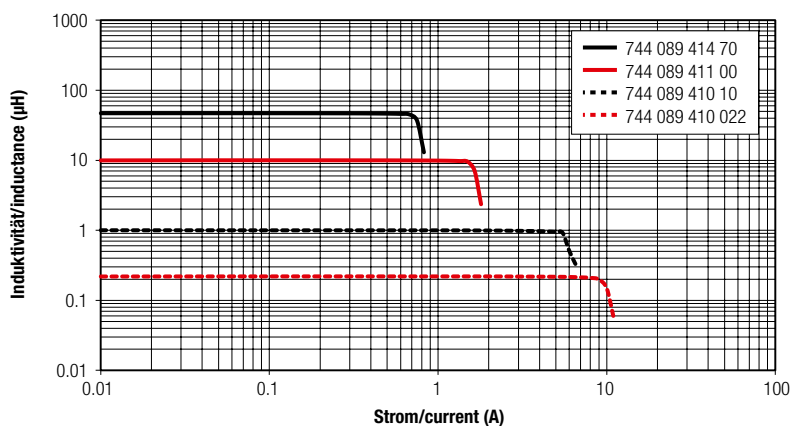
I_R referring to 40 K self-heating above ambient temperature

L_{35} referring to inductance loss of 35% typ.

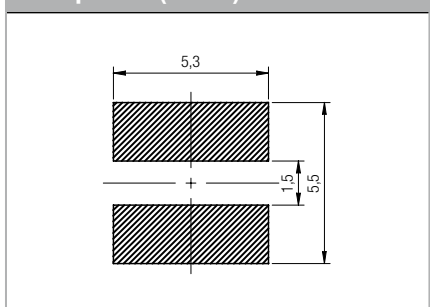
Dimensions (in mm)



Inductance vs. Current



Land pattern (in mm)



WE-SPC

SMD Power Inductor

Size 4828

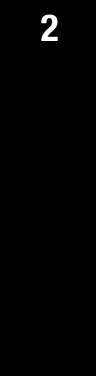
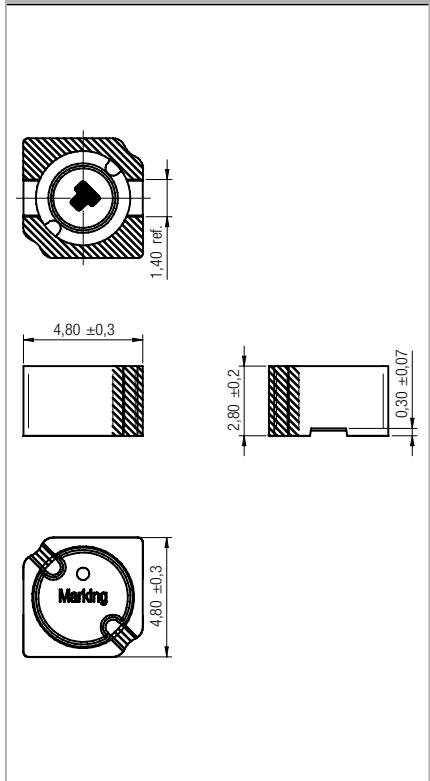


Electrical properties

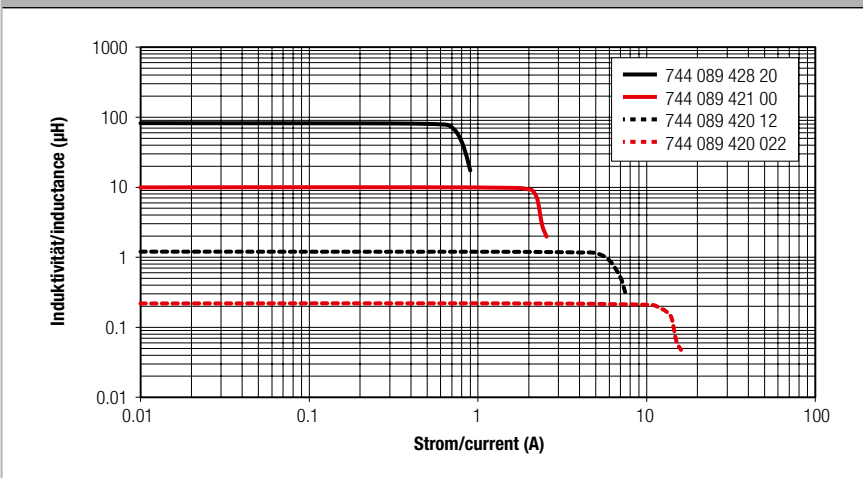
Order Code	L (μH)	Tolerance (%)	I_R (A)	I_{sat} (A)	$R_{\text{DC typ.}}$ (Ω)	$R_{\text{DC max.}}$ (Ω)	f_{res} (MHz)	VPE
744 089 420 022	0.22	± 30	5.30	13.5	0.0122	0.0144	220	500
744 089 420 039	0.39	± 30	4.20	10.3	0.0150	0.0177	160	
744 089 420 056	0.56	± 30	4.10	8.30	0.0156	0.0184	120	
744 089 420 082	0.82	± 20	3.50	6.70	0.0210	0.0248	100	
744 089 420 12	1.2	± 20	3.20	5.50	0.0220	0.026	82	
744 089 420 22	2.2	± 20	2.50	4.00	0.0380	0.045	54	
744 089 420 33	3.3	± 20	2.10	3.50	0.0483	0.057	44	
744 089 420 47	4.7	± 20	1.55	2.90	0.0868	0.103	38	
744 089 420 68	6.8	± 20	1.45	2.40	0.1100	0.130	30	
744 089 420 82	8.2	± 20	1.40	2.20	0.1130	0.134	26	
744 089 421 00	10	± 20	1.38	2.10	0.1250	0.148	25	
744 089 421 50	15	± 20	1.10	1.60	0.2070	0.245	19	
744 089 422 20	22	± 20	0.85	1.30	0.300	0.354	14	
744 089 423 30	33	± 20	0.75	1.10	0.424	0.500	12	
744 089 424 70	47	± 20	0.66	1.00	0.515	0.608	10	
744 089 425 60	56	± 20	0.51	0.82	0.780	0.920	9.5	
744 089 426 80	68	± 20	0.49	0.75	0.864	1.020	8.0	
744 089 428 20	82	± 20	0.46	0.68	0.940	1.110	7.0	

I_R referring to 40 K self-heating above ambient temperature
 I_{sat} referring to inductance loss of 35% typ.

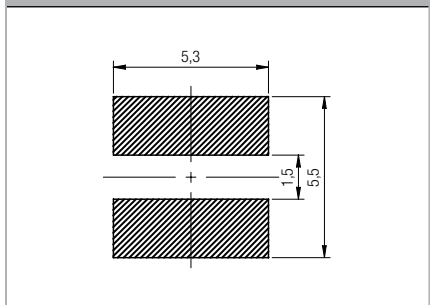
Dimensions (in mm)



Inductance vs. Current



Land pattern (in mm)

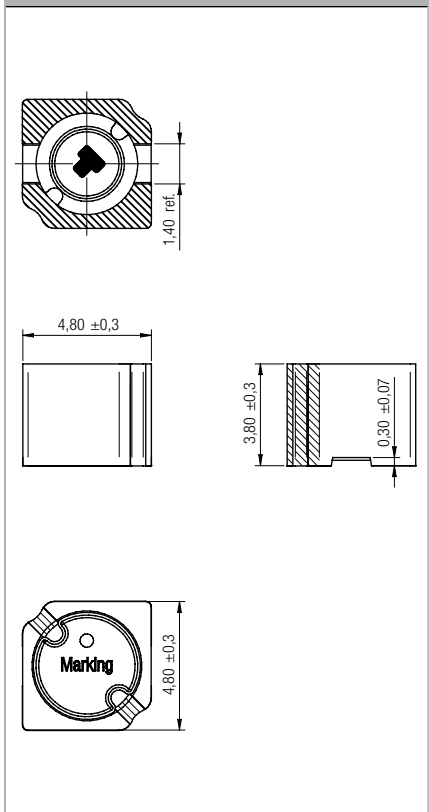


Electrical properties

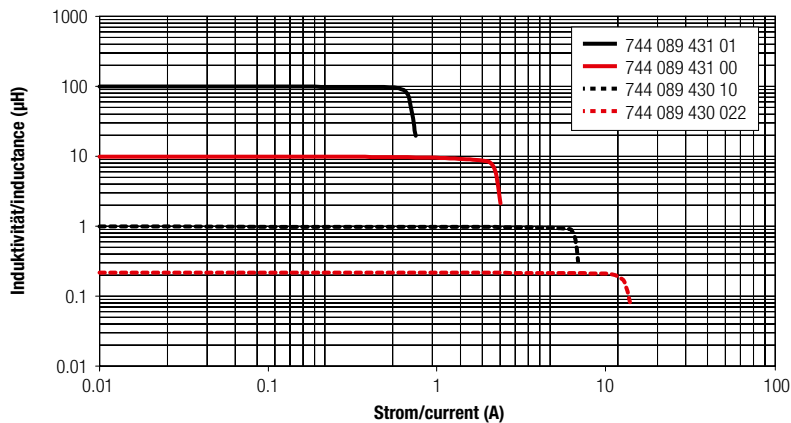
Order Code	L (μH)	Tolerance (%)	I_R (A)	I_{sat} (A)	$R_{\text{DC typ.}}$ (Ω)	$R_{\text{DC max.}}$ (Ω)	f_{res} (MHz)	VPE
744 089 430 022	0.22	± 30	5.0	13.0	0.012	0.014	250	500
744 089 430 039	0.39	± 30	4.2	9.3	0.0135	0.016	160	
744 089 430 056	0.56	± 30	3.8	8.1	0.015	0.017	130	
744 089 430 082	0.82	± 20	3.4	7.1	0.017	0.020	108	
744 089 430 10	1.0	± 20	3.3	6.5	0.019	0.022	90	
744 089 430 22	2.2	± 20	3.0	4.6	0.026	0.030	85	
744 089 430 33	3.3	± 20	2.6	3.6	0.031	0.036	64	
744 089 430 47	4.7	± 20	2.2	3.2	0.045	0.052	44	
744 089 430 68	6.8	± 20	2.0	2.7	0.051	0.059	34	
744 089 430 82	8.2	± 20	1.75	2.2	0.070	0.081	32	
744 089 431 00	10	± 20	1.65	2.1	0.082	0.094	28	
744 089 431 50	15	± 20	1.40	1.7	0.118	0.136	22	
744 089 432 20	22	± 20	1.10	1.4	0.185	0.213	19	
744 089 433 30	33	± 20	0.90	1.2	0.259	0.298	14	
744 089 434 70	47	± 20	0.80	1.05	0.305	0.351	12	
744 089 435 60	56	± 20	0.70	0.90	0.418	0.481	11	
744 089 436 80	68	± 20	0.60	0.85	0.608	0.700	9.5	
744 089 438 20	82	± 20	0.58	0.80	0.689	0.750	8.0	
744 089 431 01	100	± 20	0.52	0.68	0.770	0.850	7.8	

I_R referring to 40 K self-heating above ambient temperature
 I_{sat} referring to inductance loss of 35% typ.

Dimensions (in mm)



Inductance vs. Current



Land pattern (in mm)

