

WE-PD4

SMD Power Inductor

Size S



Characteristics

- Current loading up to 38 A
- Compact size
- Low-loss ferrite core
- Application frequency range up to 10 MHz
- Operating temperature: $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$

Applications

- Noise suppression
- Perfectly suitable for switching regulators e.g. National Semiconductor, Linear Technology, Maxim, Semtech, Texas Instruments, Fairchild Semiconductor, Cologne Chip, ON Semiconductor, STMicroelectronics, MPS, Exar, Analogic Tech and Diodes

QR-Code

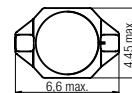
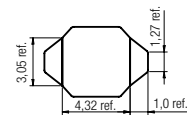


Electrical properties

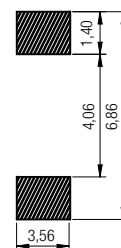
Order Code	L (μH)	Tolerance (%)	I_R (A)	I_{sat} (A)	$R_{\text{DC typ.}}$ (Ω)	$R_{\text{DC max.}}$ (Ω)	Qty.
744 550 1	1.0	± 20	2.90	2.90	0.017	0.05	500
744 550 15	1.5		2.80	2.60	0.020	0.05	
744 550 22	2.2		2.40	2.30	0.028	0.07	
744 550 33	3.3		2.00	2.00	0.044	0.08	
744 550 47	4.7		1.50	1.50	0.063	0.09	
744 550 68	6.8		1.40	1.20	0.092	0.13	
744 551 0	10		1.20	1.10	0.121	0.16	
744 551 15	15		1.10	0.90	0.176	0.23	
744 551 22	22		0.80	0.70	0.255	0.37	
744 551 33	33		0.60	0.58	0.362	0.51	
744 551 47	47		0.50	0.50	0.556	0.64	
744 551 68	68		0.40	0.40	0.79	0.86	
744 552 0	100		0.30	0.31	1.08	1.27	
744 552 15	150		0.25	0.27	1.45	2.00	
744 552 22	220		0.20	0.22	2.58	3.11	
744 552 33	330		0.16	0.18	4.15	5.00	
744 552 47	470		0.16	0.15	5.58	6.80	
744 553 0	1000		0.07	0.10	11.50	13.80	

I_R referring to 15 K self-heating above ambient temperature
 I_{sat} referring to inductance loss of 10% typ.

Dimensions (in mm)



Land pattern (in mm)



WE-PD4 SMD Power Inductor



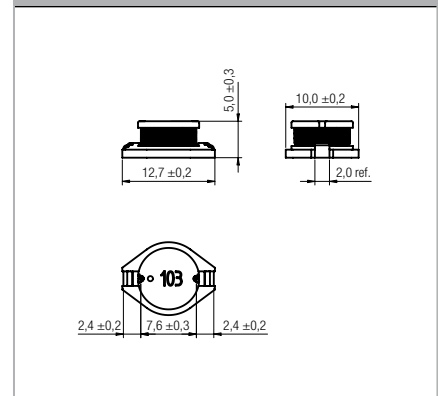
Size L / Size X

Electrical properties: Size L

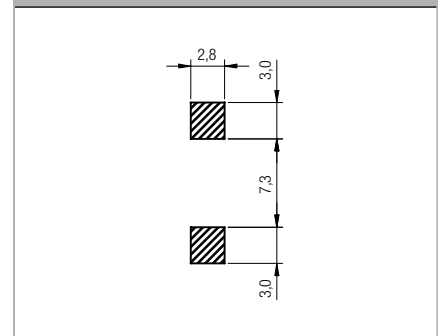
Order Code	L (µH)	Tolerance (%)	I _R (A)	I _{sat} (A)	R _{DC typ.} (Ω)	R _{DC max.} (Ω)	Qty.
744 560 1	1.0	±20	8.60	14.25	0.0041	0.007	600
744 560 15	1.5	±20	7.20	10.70	0.0058	0.009	
744 560 25	2.5	±20	5.80	10.00	0.0089	0.012	
744 560 33	3.3	±20	5.30	7.00	0.0107	0.015	
744 560 47	4.7	±20	5.00	6.00	0.0146	0.019	
744 560 56	5.6	±20	4.00	6.00	0.0244	0.032	
744 560 68	6.8	±20	3.80	5.10	0.0259	0.034	
744 560 82	8.2	±20	3.20	4.20	0.0338	0.040	
744 561 0	10	±20	3.30	5.00	0.0349	0.045	
744 561 15	15	±20	2.90	3.60	0.0432	0.060	
744 561 22	22	±20	2.60	3.10	0.071	0.095	
744 561 33	33	±10	2.30	2.60	0.094	0.12	
744 561 47	47	±10	1.80	2.14	0.142	0.19	
744 561 68	68	±10	1.60	1.70	0.187	0.24	
744 562 0	100	±10	1.40	1.50	0.253	0.33	
744 562 15	150	±10	1.00	1.20	0.447	0.59	
744 562 22	220	±10	0.90	1.10	0.601	0.78	
744 562 33	330	±10	0.70	0.80	0.893	1.15	
744 562 47	470	±10	0.60	0.65	1.315	1.70	
744 562 68	680	±10	0.50	0.55	1.942	2.60	
744 563 0	1000	±10	0.40	0.52	2.940	3.90	
744 563 22	2200	±10	0.25	0.26	6.264	8.20	
744 563 47	4700	±10	0.20	0.20	13.295	17.0	
744 563 82	8200	±5	0.11	0.17	28.000	35.0	
744 564 0	10000	±10	0.10	0.15	29.880	39.0	

I_s referring to 40 K self-heating above ambient temperature
 I_{10%} referring to inductance loss of 10% typ.

Dimensions (in mm)



Land pattern (in mm)



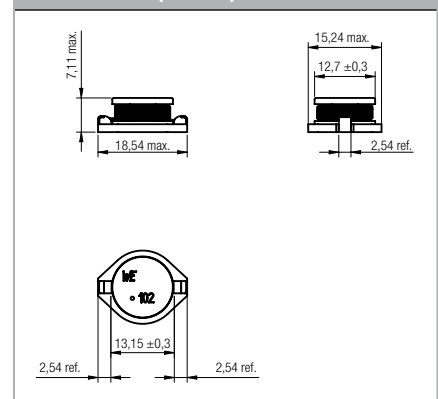
2

Electrical properties: Size X

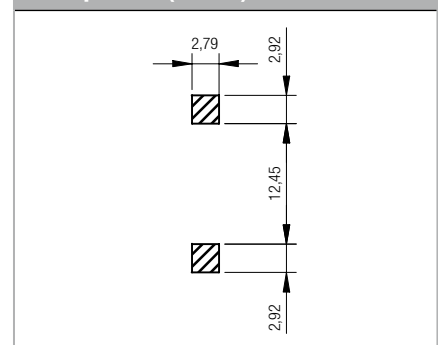
Order Code	L (µH)	Tolerance (%)	I _R (A)	I _{sat} (A)	R _{DC typ.} (Ω)	R _{DC max.} (Ω)	Qty.
744 580 01	1.0	±20	8.6	25.0	0.005	0.009	300
744 580 02	2.2		7.1	20.3	0.008	0.014	
744 580 03	3.3		6.2	15.8	0.010	0.018	
744 580 05	5.6		5.3	13.1	0.012	0.020	
744 580 10	10		4.3	10.0	0.021	0.031	
744 581 15	15		4.0	8.0	0.030	0.036	
744 581 22	22		3.5	7.0	0.043	0.047	
744 581 33	33		3.0	5.5	0.060	0.066	
744 581 47	47		2.6	4.5	0.076	0.086	
744 581 68	68		2.3	3.6	0.110	0.13	
744 582 0	100		1.8	3.4	0.141	0.19	
744 582 15	150		1.5	2.7	0.210	0.25	
744 582 20	220		1.2	2.4	0.326	0.38	
744 582 33	330		1.0	1.9	0.431	0.56	
744 582 47	470		0.82	1.6	0.633	0.85	
744 582 68	680		0.72	1.3	0.954	1.10	
744 583 0	1000		0.56	1.1	1.370	1.80	

I_s referring to 40 K self-heating above ambient temperature
 I_{10%} referring to inductance loss of 10% typ.

Dimensions (in mm)



Land pattern (in mm)



WE-PD4

SMD Power Inductor

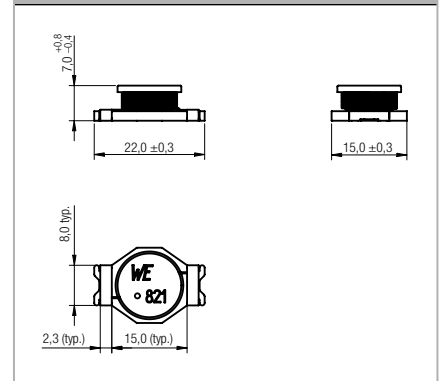
Size XL

Electrical properties

Order Code	L (μ H)	Tolerance (%)	I_R (A)	I_{sat} (A)	$R_{DC\ typ.}$ (Ω)	$R_{DC\ max.}$ (Ω)	Qty.
744 570 06	0.47	± 20	18.0	38.0	0.0013	0.0016	250
744 570 08	0.8	± 20	16.0	35.0	0.0023	0.0028	
744 570 10	1.0	± 25	15.0	32.0	0.0030	0.0036	
744 570 12	1.2	± 20	15.0	30.0	0.0032	0.0038	
744 570 18	1.8	± 20	13.0	25.0	0.0045	0.0054	
744 570 27	2.7	± 20	10.0	20.0	0.0070	0.0084	
744 570 33	3.3	± 20	9.0	17.0	0.0077	0.0092	
744 570 47	4.7	± 20	8.5	15.0	0.0088	0.011	
744 570 56	5.6	± 20	7.8	14.0	0.0124	0.015	
744 570 68	6.8	± 20	7.5	12.0	0.0141	0.017	
744 570 82	8.2	± 20	7.0	11.0	0.0155	0.019	
744 571 0	10	± 20	6.5	10.0	0.0172	0.021	
744 571 12	12	± 15	5.5	9.5	0.0236	0.028	
744 571 15	15	± 15	5.0	9.0	0.0288	0.035	
744 571 18	18	± 15	4.6	8.0	0.0330	0.040	
744 571 22	22	± 15	4.0	6.5	0.0393	0.047	
744 571 27	27	± 15	3.8	6.0	0.0435	0.052	
744 571 33	33	± 15	3.4	5.5	0.0584	0.070	
744 571 39	39	± 10	3.2	5.2	0.0650	0.078	
744 571 47	47	± 10	2.8	5.0	0.0911	0.109	
744 571 56	56	± 10	2.6	4.5	0.0965	0.116	
744 571 68	68	± 10	2.4	4.0	0.112	0.134	
744 571 82	82	± 10	2.2	3.5	0.144	0.173	
744 572 0	100	± 10	2.0	3.0	0.168	0.202	
744 572 12	120	± 10	1.6	3.0	0.196	0.235	
744 572 15	150	± 10	1.5	2.6	0.223	0.268	
744 572 18	180	± 10	1.3	2.5	0.256	0.307	
744 572 22	220	± 10	1.2	2.4	0.323	0.388	
744 572 27	270	± 10	1.1	2.2	0.399	0.479	
744 572 33	330	± 10	1.0	1.9	0.470	0.564	
744 572 39	390	± 10	0.9	1.7	0.558	0.670	
744 572 47	470	± 10	0.82	1.4	0.674	0.809	
744 572 56	560	± 10	0.78	1.3	0.855	1.026	
744 572 68	680	± 10	0.72	1.2	1.002	1.200	
744 572 82	820	± 10	0.64	1.1	1.172	1.400	
744 572 30	1000	± 10	0.56	1.0	1.506	1.800	

I_R referring to 40 K self-heating above ambient temperature
 $I_{10\%}$ referring to inductance loss of 10% typ.

Dimensions (in mm)



Land pattern (in mm)

