

WE-PD2A

SMD Power Inductor

Size 4532



Characteristics

- Open size
- Current capability up to 14 A
- Operating temperature: -40°C to +125°C
- Recommended solder profile: Reflow

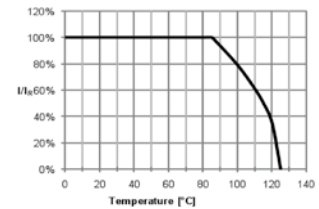
Applications

- Switching regulators with low operating voltage (navigation system, air conditioning, entertainment, park assistance control)
- Integrated DC/DC-converter
- Perfectly suitable for switching regulators with extremely high efficiency

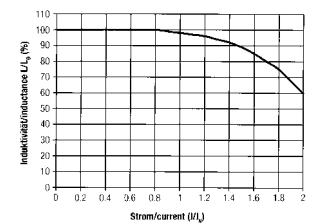
Note

The ambient temperature when operating the WE-PD series of storage chokes at full current rating load should generally range from -40 °C to +85 °C. The self-heating of the component must be taken into account at higher ambient temperatures in order that the permissible solder joint temperature is not exceeded or the wire insulation damaged. The wire used can withstand a temperature of up to +150 °C. The ferrite core itself may be used over a far greater temperature range (approx. -50 °C to +250 °C [Curie temperature]). However, in this case, the tolerance limits of the inductor may be exceeded due to the temperature dependence of permeability.

Current derating at ambient temperature of >85 °C



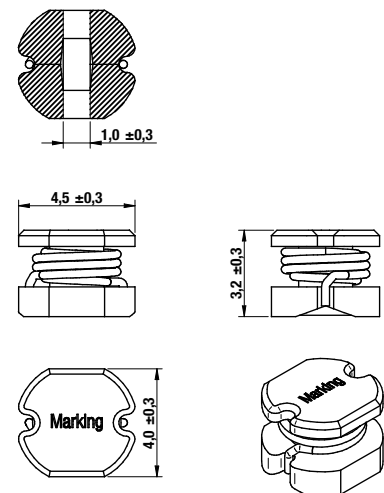
Inductance vs. DC bias current



Electrical properties: Size 4532

Order Code	L (µH)	Tolerance (%)	R _{DC} typ. (Ω)	R _{DC} max. (Ω)	I _R (A)	I _{sat} (A)
784 773 0	1.0	±20	0.014	0.049	4.00	5.72
784 773 018	1.8		0.028	0.064	2.70	3.60
784 773 022	2.2		0.034	0.071	2.50	3.38
784 773 033	3.3		0.041	0.086	2.00	2.88
784 773 039	3.9		0.054	0.094	1.88	2.57
784 773 047	4.7		0.059	0.110	1.82	2.46
784 773 056	5.6		0.069	0.126	1.58	2.43
784 773 068	6.8		0.076	0.131	1.54	2.10
784 773 082	8.2		0.116	0.146	1.50	1.80
784 773 10	10		0.118	0.182	1.45	1.74
784 773 112	12		0.156	0.210	1.28	1.62
784 773 115	15		0.204	0.235	1.20	1.46
784 773 118	18	0.225	0.338	1.10	1.29	
784 773 122	22	0.261	0.370	1.00	1.22	
784 773 127	27	±10	0.328	0.522	0.94	1.00
784 773 133	33		0.370	0.540	0.86	0.90
784 773 139	39		0.418	0.587	0.77	0.87
784 773 147	47		0.523	0.844	0.68	0.77
784 773 156	56		0.714	0.937	0.64	0.75
784 773 168	68		0.754	1.117	0.56	0.68

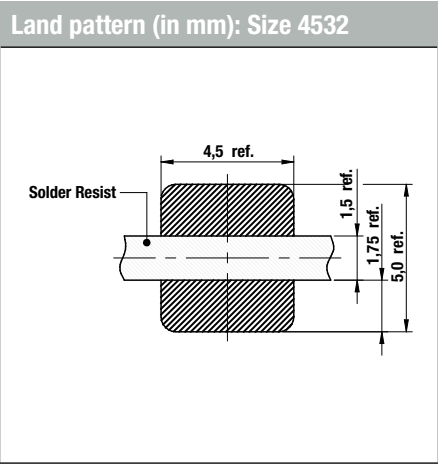
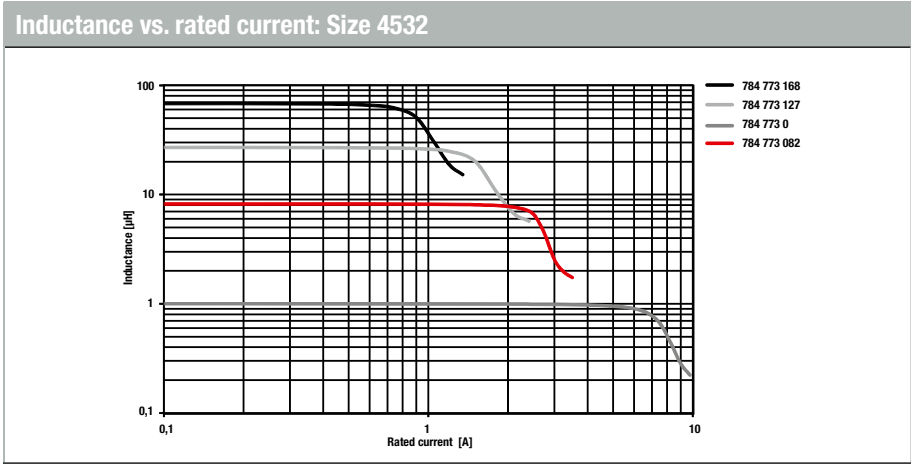
Dimensions (in mm): Size 4532



WE-PD2A

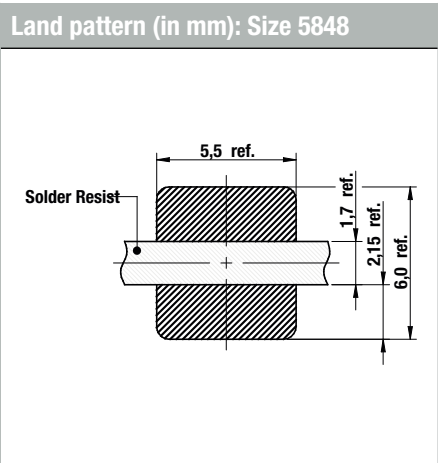
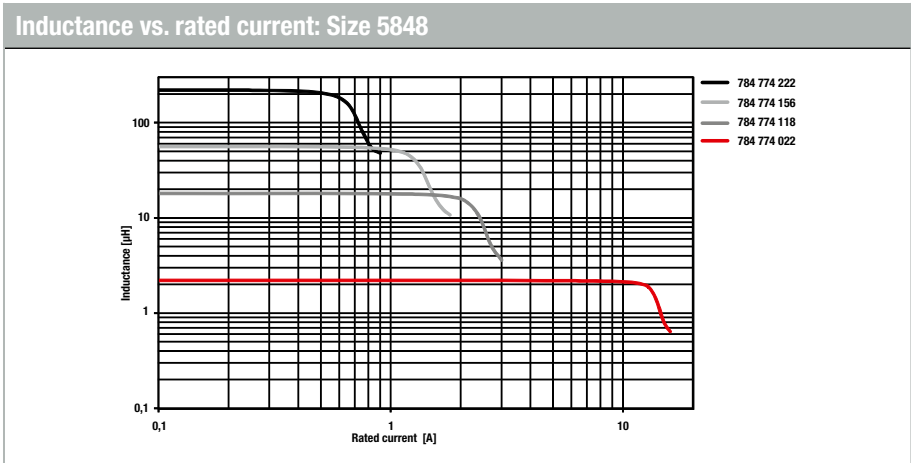
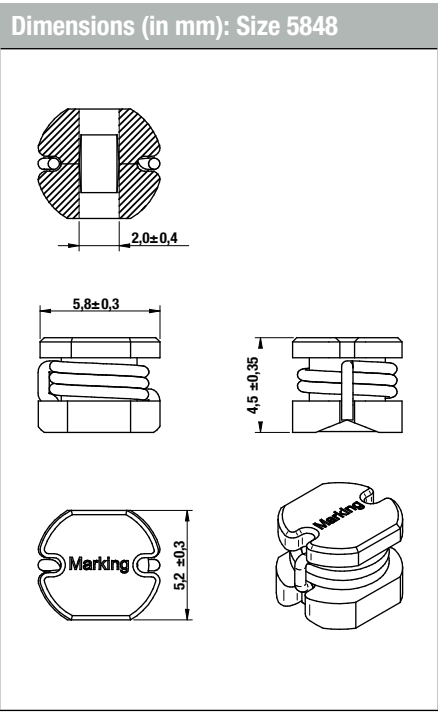
SMD Power Inductor

Size 4532 / Size 5848



Electrical properties: Size 5848

Order Code	L (µH)	Tolerance (%)	R _{DC} typ. (Ω)	R _{DC} max. (Ω)	I _R (A)	I _{sat} (A)
784 774 003	0.33	±20	0.006	0.008	10.8	15.30
784 774 006	0.6	-40/+20	0.009	0.018	8.20	13.50
784 774 022	2.2	±20	0.026	0.041	4.60	8.20
784 774 027	2.7		0.032	0.045	4.00	8.00
784 774 033	3.3		0.042	0.060	3.70	7.50
784 774 047	4.7		0.056	0.071	3.00	5.50
784 774 068	6.8		0.071	0.082	2.40	4.50
784 774 10	10		0.078	0.100	2.20	2.50
784 774 112	12		0.082	0.110	2.00	1.94
784 774 115	15		0.089	0.140	1.53	1.90
784 774 118	18		0.104	0.150	1.45	1.69
784 774 122	22		0.109	0.180	1.28	1.53
784 774 127	27	0.133	0.200	1.19	1.40	
784 774 133	33	±15	0.150	0.230	1.09	1.17
784 774 139	39		0.215	0.320	0.94	1.10
784 774 147	47		0.260	0.370	0.86	1.00
784 774 156	56	±10	0.298	0.420	0.77	0.90
784 774 168	68		0.313	0.460	0.64	0.86
784 774 182	82		0.475	0.600	0.60	0.72
784 774 20	100		0.510	0.650	0.57	0.68
784 774 212	120		0.660	0.930	0.49	0.63
784 774 215	150		0.720	1.100	0.46	0.54
784 774 218	180		0.850	1.380	0.42	0.50
784 774 222	220		0.945	1.570	0.41	0.47



WE-PD2A

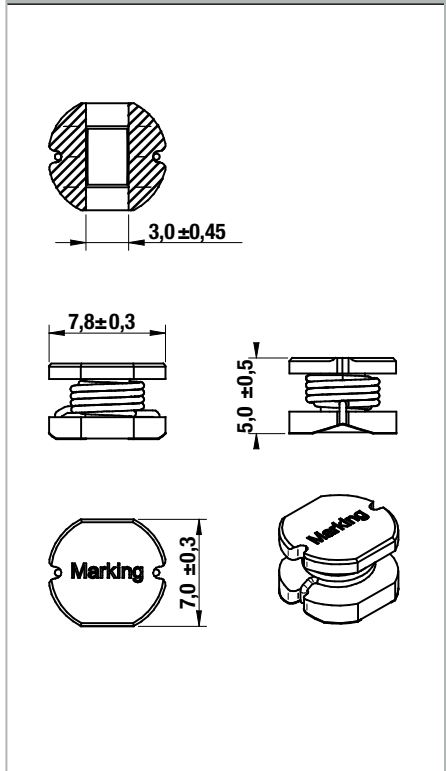
SMD Power Inductor

Size 7850

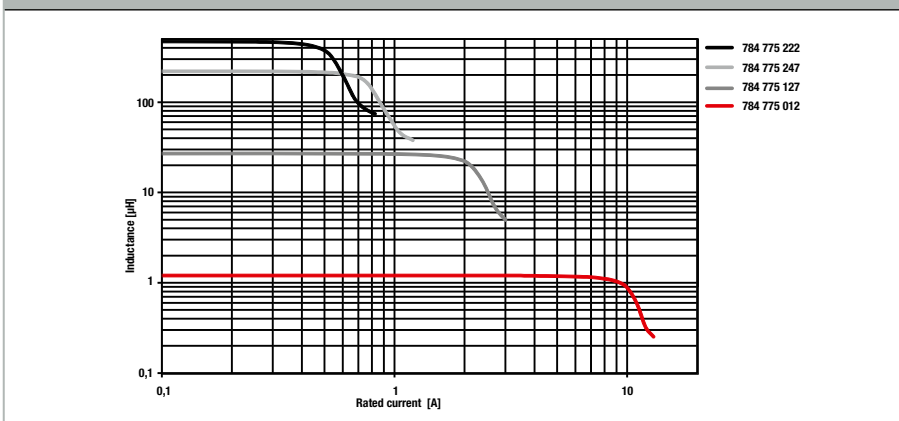
Electrical properties

Order Code	L (µH)	Tolerance (%)	R _{DC} typ. (Ω)	R _{DC} max. (Ω)	I _R (A)	I _{sat} (A)	
784 775 012	1.2	±20	0.005	0.006	6.18	8.00	
784 775 022	2.2		0.008	0.010	6.00	6.00	
784 775 033	3.3		0.012	0.014	4.90	4.90	
784 775 047	4.7		0.016	0.019	4.50	4.50	
784 775 056	5.6		0.018	0.022	4.00	4.00	
784 775 068	6.8		0.022	0.026	3.70	3.80	
784 775 082	8.2		0.024	0.029	3.20	3.20	
784 775 110	10		±10	0.040	0.070	2.30	2.95
784 775 112	12			0.042	0.080	2.18	2.23
784 775 115	15			0.044	0.090	1.93	2.20
784 775 118	18	0.053		0.100	1.89	2.14	
784 775 122	22	0.065		0.110	1.76	1.81	
784 775 127	27	0.074		0.120	1.48	1.62	
784 775 133	33	0.089		0.130	1.35	1.47	
784 775 139	39	0.116		0.160	1.25	1.33	
784 775 147	47	0.134		0.180	1.17	1.24	
784 775 168	68	0.218		0.280	0.99	1.05	
784 775 182	82	0.248	0.370	0.90	0.95		
784 775 20	100	0.281	0.430	0.77	0.86		
784 775 212	120	0.340	0.470	0.67	0.81		
784 775 215	150	0.467	0.640	0.60	0.71		
784 775 218	180	0.574	0.710	0.55	0.57		
784 775 222	220	0.614	0.960	0.51	0.56		
784 775 227	270	0.699	1.110	0.47	0.51		
784 775 233	330	0.980	1.260	0.43	0.48		
784 775 239	390	1.151	1.770	0.38	0.43		
784 775 247	470	1.370	1.960	0.360	0.38		

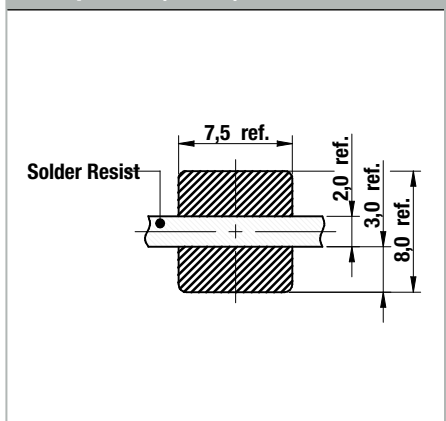
Dimensions (in mm)



Inductance vs. rated current



Land pattern (in mm)



WE-PD2A SMD Power Inductor

Size 1054



Electrical properties						
Order Code	L (μH)	Tolerance (%)	R _{DC} typ. (Ω)	R _{DC} max. (Ω)	I _R (A)	I _{sat} (A)
784 776 012	1.2	±20	0.004	0.0048	7.40	11.00
784 776 022	2.2		0.007	0.0078	7.00	8.00
784 776 033	3.3		0.009	0.0102	6.00	7.00
784 776 047	4.7		0.012	0.014	5.00	6.00
784 776 056	5.6		0.015	0.018	4.80	5.50
784 776 068	6.8		0.016	0.019	4.40	5.00
784 776 082	8.2		0.020	0.024	4.20	4.25
784 776 10	10		0.028	0.060	2.98	3.24
784 776 112	12		0.033	0.070	2.72	3.15
784 776 115	15		0.034	0.080	2.47	2.88
784 776 118	18		0.043	0.090	2.36	2.43
784 776 122	22		0.051	0.100	2.04	2.07
784 776 127	27		0.063	0.110	1.95	1.98
784 776 133	33		0.083	0.120	1.78	1.89
784 776 139	39		0.088	0.140	1.62	1.80
784 776 147	47		0.095	0.170	1.45	1.62
784 776 156	56		0.112	0.190	1.36	1.53
784 776 168	68		0.138	0.220	1.19	1.49
784 776 182	82	0.150	0.250	1.11	1.17	
784 776 20	100	±10	0.200	0.350	1.02	1.10
784 776 212	120		0.243	0.400	0.94	0.99
784 776 215	150		0.300	0.470	0.81	0.90
784 776 218	180		0.320	0.630	0.76	0.78
784 776 222	220		0.451	0.730	0.67	0.77
784 776 227	270		0.500	0.970	0.62	0.68
784 776 233	330		0.750	1.150	0.52	0.59
784 776 239	390		0.794	1.300	0.49	0.54
784 776 247	470		0.969	1.480	0.44	0.50

