

KCD Series

SMD Shielded Power Inductor
Size 1205



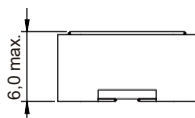
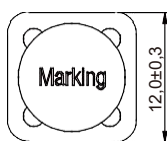
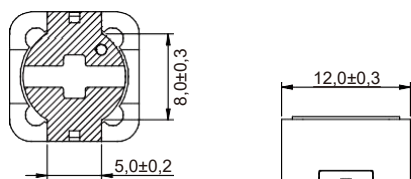
FEATURES

Magnetically shielded version which results in a low leakage field;
Highest possible current loading for SMD Inductors;
Low self-losses;
Quantity: 500pcs;

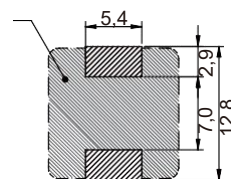
APPLICATIONS

Perfectly suitable for switching regulators with high efficiency;
Integrated DC/DC-converter;
Switching regulators with low operating voltages;

Dimensions: [mm]



Land Patterns: [mm]



Part No	Inductance (μH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1205-1R5YW	1.5	±30%	10.5	12.5	0.004	0.006
KCD1205-2R2YW	2.2	±30%	10.0	11.0	0.005	0.008
KCD1205-3R5YW	3.5	±30%	9.25	9.0	0.005	0.008
KCD1205-4R7YW	4.7	±30%	8.25	8.0	0.008	0.011
KCD1205-6R8MW	6.8	±20%	5.60	6.0	0.014	0.022
KCD1205-8R2MW	8.2	±20%	6.25	6.25	0.014	0.020
KCD1205-100MW	10	±20%	4.09	5.6	0.021	0.025
KCD1205-120MW	12	±20%	3.91	4.85	0.023	0.027
KCD1205-150MW	15	±20%	3.75	4.55	0.025	0.030
KCD1205-180MW	18	±20%	3.48	4.30	0.029	0.034
KCD1205-220MW	22	±20%	3.37	3.77	0.031	0.036
KCD1205-270MW	27	±20%	2.97	3.55	0.040	0.051
KCD1205-330MW	33	±20%	2.68	3.0	0.049	0.057
KCD1205-390MW	39	±20%	2.49	2.74	0.057	0.068
KCD1205-470MW	47	±20%	2.21	2.6	0.072	0.075

Part No	Inductance (μH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1205-560MW	56	±20%	2.01	2.35	0.087	0.110
KCD1205-680MW	68	±20%	1.91	2.19	0.096	0.120
KCD1205-820MW	82	±20%	1.65	1.88	0.129	0.140
KCD1205-101MW	100	±20%	1.53	1.70	0.150	0.160
KCD1205-121MW	120	±20%	1.30	1.56	0.159	0.170
KCD1205-151MW	150	±20%	1.21	1.43	0.185	0.230
KCD1205-181MW	180	±20%	1.06	1.24	0.242	0.29
KCD1205-221MW	220	±20%	0.96	1.2	0.29	0.4
KCD1205-271MW	270	±20%	0.89	1.0	0.338	0.46
KCD1205-331MW	330	±20%	0.78	0.97	0.442	0.51
KCD1205-391MW	390	±20%	0.68	0.85	0.59	0.69
KCD1205-471MW	470	±20%	0.64	0.8	0.66	0.77
KCD1205-561MW	560	±20%	0.62	0.7	0.69	0.86
KCD1205-681MW	680	±20%	0.55	0.68	0.88	1.2
KCD1205-821MW	820	±20%	0.51	0.6	1.025	1.34
KCD1205-181MW	1000	±20%	0.43	0.5	1.43	1.53

Note:

1 Operating Temperature : -40°C~+125°C

2 Saturation current will cause L to drop approximately 35%

3 Temperature rise current: The actual value of DC current when the temperature rise is $\Delta T=40^{\circ}\text{C}$