

KCD Series

SMD Shielded Power Inductor
Size 1209



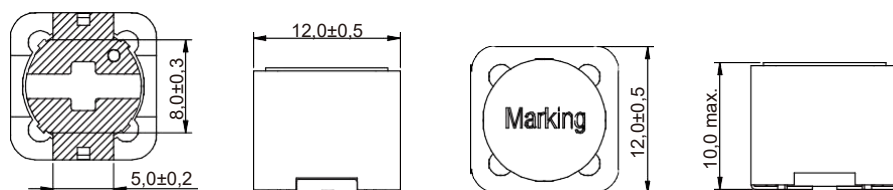
FEATURES

Magnetically shielded version which results in a low leakage field;
Highest possible current loading for SMD Inductors;
Low self-losses;
Quantity: 250pcs;

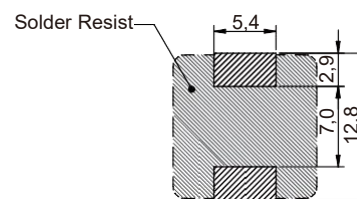
APPLICATIONS

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

Dimensions: [mm]



Land Patterns: [mm]



Electrical Properties:

Part No	Inductance (μH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1209-1R0YW	1.0	±20%	13.0	25.0	0.0038	0.006
KCD1209-2R2YW	2.2	+40/-20%	11.5	20.0	0.0049	0.006
KCD1209-3R5YW	3.5	±20%	11.0	16.5	0.0059	0.0085
KCD1209-4R7YW	4.7	±20%	9.3	13.0	0.0074	0.011
KCD1209-6R8MW	6.8	±20%	8.4	12.8	0.0091	0.014
KCD1209-100MW	10	±20%	7.1	10.5	0.0129	0.021
KCD1209-150MW	15	±20%	6.5	8.0	0.0207	0.028
KCD1209-220MW	22	±20%	5.3	6.5	0.0233	0.028
KCD1209-270MW	27	±20%	4.6	5.8	0.030	0.040
KCD1209-330MW	33	±20%	4.2	5.5	0.0368	0.045
KCD1209-390MW	39	±20%	4.1	5.0	0.044	0.056
KCD1209-470MW	47	±20%	3.8	4.5	0.0459	0.060
KCD1209-680MW	68	±20%	3.2	3.6	0.0686	0.0885
KCD1209-820MW	82	±20%	2.75	3.4	0.0905	0.105
KCD1209-101MW	100	±20%	2.5	3.1	0.100	0.110

Part No	Inductance (μH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1209-151MW	150	±20%	2.1	2.7	0.151	0.20
KCD1209-221MW	220	±20%	1.8	2.2	0.193	0.30
KCD1209-271MW	270	±20%	1.6	2.1	0.248	0.33
KCD1209-331MW	330	±20%	1.5	1.7	0.363	0.43
KCD1209-471MW	470	±20%	1.4	1.5	0.437	0.56
KCD1209-681MW	680	±20%	1.1	1.3	0.660	0.825
KCD1209-821MW	820	±20%	0.95	1.1	0.815	1.00
KCD1209-102MW	1000	±20%	0.9	1.0	0.930	1.20
KCD1209-152MW	1500	±20%	0.8	0.8	1.800	2.30

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 $\Delta T=40^{\circ}\text{C}$