

## KCD Series SMD Shielded Power Inductor Size 1207



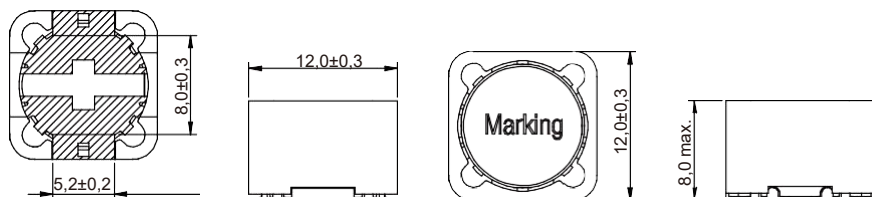
### FEATURES

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

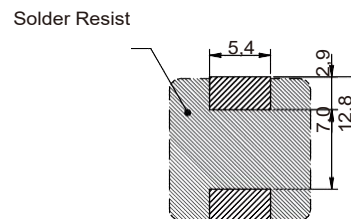
### APPLICATIONS

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

### Dimensions: [mm]



### Land Patterns: [mm]



### Electrical Properties:

Part No	Inductance (µH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1207-R47R	0.47	+20/-25%	23.5	26.4	0.003	0.003
KCD1207-R75R	0.75	+20/-25%	19.8	21.0	0.003	0.004
KCD1207-1R2R	1.2	+40/-20%	12.0	16.6	0.005	0.007
KCD1207-2R4R	2.4	+20/-25%	10.1	14.3	0.009	0.012
KCD1207-3R5R	3.5	+40/-20%	8.9	9.6	0.011	0.014
KCD1207-4R7R	4.7	+40/-20%	8.5	9.3	0.012	0.016
KCD1207-6R1R	6.1	+40/-20%	7.6	8.6	0.015	0.018
KCD1207-7R6R	7.6	+40/-20%	7.4	8.0	0.016	0.020
KCD1207-100M	10	±20%	6.2	6.6	0.019	0.022
KCD1207-120M	12	±20%	5.9	6.3	0.021	0.024
KCD1207-150M	15	±20%	5.0	6.0	0.024	0.027
KCD1207-180M	18	±20%	4.2	5.4	0.032	0.039
KCD1207-220M	22	±20%	4.1	5.0	0.033	0.043
KCD1207-270M	27	±20%	3.7	3.8	0.035	0.046
KCD1207-330M	33	±20%	3.2	3.6	0.047	0.064
KCD1207-390M	39	±20%	3.0	3.5	0.053	0.073
KCD1207-470M	47	±20%	2.7	3.0	0.076	0.100
KCD1207-560M	56	±20%	2.4	2.9	0.085	0.110
KCD1207-680M	68	±20%	2.3	2.5	0.090	0.140
KCD1207-820M	82	±20%	2.25	2.45	0.086	0.160
KCD1207-101M	100	±20%	2.2	2.4	0.102	0.220
KCD1207-151M	150	±20%	2.1	1.8	0.136	0.280

Part No	Inductance (μH)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ (Ω)	DCR Max. (Ω)
KCD1207-181M	180	±20%	1.4	1.6	0.188	0.35
KCD1207-221M	220	±20%	1.3	1.49	0.247	0.39
KCD1207-331M	330	±20%	1.1	1.1	0.349	0.64
KCD1207-471M	470	±20%	0.9	0.9	0.496	0.98
KCD1207-561M	560	±20%	0.8	0.9	0.593	1.07
KCD1207-681M	680	±20%	0.7	0.8	0.840	1.46
KCD1207-821M	820	±20%	0.6	0.8	0.936	1.64
KCD1207-102M	1000	±20%	0.6	0.7	1.040	1.82
KCD1207-152M	1500	±20%	0.5	0.5	1.450	1.90

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