

# Wire Wound SMD Power Inductor-KCD Series

## KCD Series

SMD Shielded Power Inductor

Size 0704



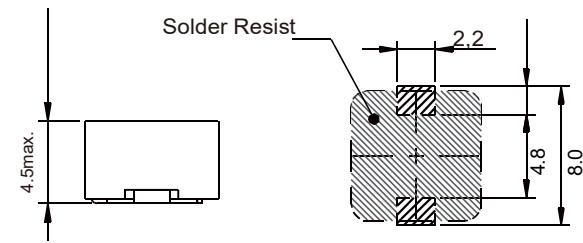
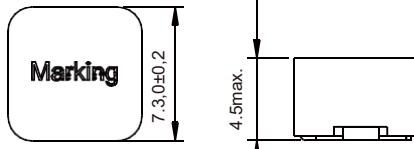
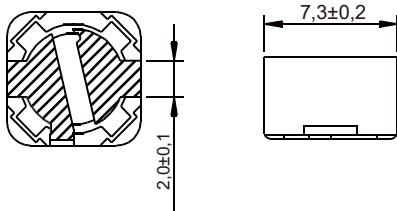
### FEATURES

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 ( $\mu$ H)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ. ( $\Omega$ )	DCR Max. ( $\Omega$ )
KCD0704-1R0M	1.0	±20%	6.84	9.0	0.0084	0.01
KCD0704-2R2M	2.2	±20%	6.0	6.5	0.013	0.02
KCD0704-3R3M	3.3	±20%	3.5	4.6	0.025	0.03
KCD0704-4R7M	4.7	±20%	3.2	4.0	0.025	0.04
KCD0704-100M	10	±20%	2.0	2.6	0.045	0.049
KCD0704-120M	12	±20%	1.82	2.4	0.054	0.058
KCD0704-150M	15	±20%	1.6	2.2	0.07	0.081
KCD0704-180M	18	±20%	1.5	2.05	0.08	0.091
KCD0704-220M	22	±20%	1.41	1.7	0.09	0.11
KCD0704-270M	27	±20%	1.24	1.55	0.117	0.15
KCD0704-330M	33	±20%	1.13	1.4	0.14	0.17
KCD0704-390M	39	±20%	1.11	1.23	0.145	0.23
KCD0704-470M	47	±20%	1.03	1.1	0.17	0.26
KCD0704-560M	56	±20%	0.93	1.05	0.207	0.35
KCD0704-680M	68	±20%	0.87	0.95	0.239	0.38
KCD0704-820M	82	±20%	0.84	0.9	0.257	0.43
KCD0704-101M	100	±20%	0.79	0.75	0.29	0.61
KCD0704-121M	120	±20%	0.67	0.7	0.4	0.66
KCD0704-151M	150	±20%	0.52	0.63	0.66	0.88

Part No	Inductance ( $\mu$ H)	Tolerance	Temperature Rise Current (A)	Saturation Current (A)	DCR Typ ( $\Omega$ )	DCR Max. ( $\Omega$ )
KCD0704-181M	180	$\pm 20\%$	0.51	0.56	0.68	0.98
KCD0704-221M	220	$\pm 20\%$	0.44	0.54	0.92	1.17
KCD0704-271M	270	$\pm 20\%$	0.43	0.48	0.97	1.64
KCD0704-331M	330	$\pm 20\%$	0.39	0.45	1.15	1.86
KCD0704-391M	390	$\pm 20\%$	0.38	0.42	1.25	2.85
KCD0704-471M	470	$\pm 20\%$	0.29	0.34	1.6	3.01
KCD0704-561M	560	$\pm 20\%$	0.28	0.31	1.72	3.62
KCD0704-681M	680	$\pm 20\%$	0.23	0.28	2.6	4.63
KCD0704-821M	820	$\pm 20\%$	0.21	0.26	3.0	5.2
KCD0704-102M	1000	$\pm 20\%$	0.2	0.25	3.27	6.0

**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  $\Delta T=40^\circ C$