

SMD POWER INDUCTOR

JCD SERIES



FEATURES/APPLICATOINS

- .Carrier tape packing use for SMT
- .High rated current, Low DCR, Rotundity; Diameter: 3.5mm~10mm, Height: 1.0mm~6.0mm
- .Suitable for reflow SMT Craft soldering
- .Lead free products, RoHS compliant
- .Widely use in DC-DC converter/LCD/Notebook/PDA/Telecommunications/Digital products

PRODUCT INDICATION

J C D **105** **–** **470** **M**
① ② ③ ④

- ① Product type: JCD type
- ② External dimension: 10 for Diameter 10.0mm, 5 for Height 5.0mm
- ③ Electrical code: 470 for 47 μ H
- ④ Tolerance: K for $\pm 10\%$; M for $\pm 20\%$

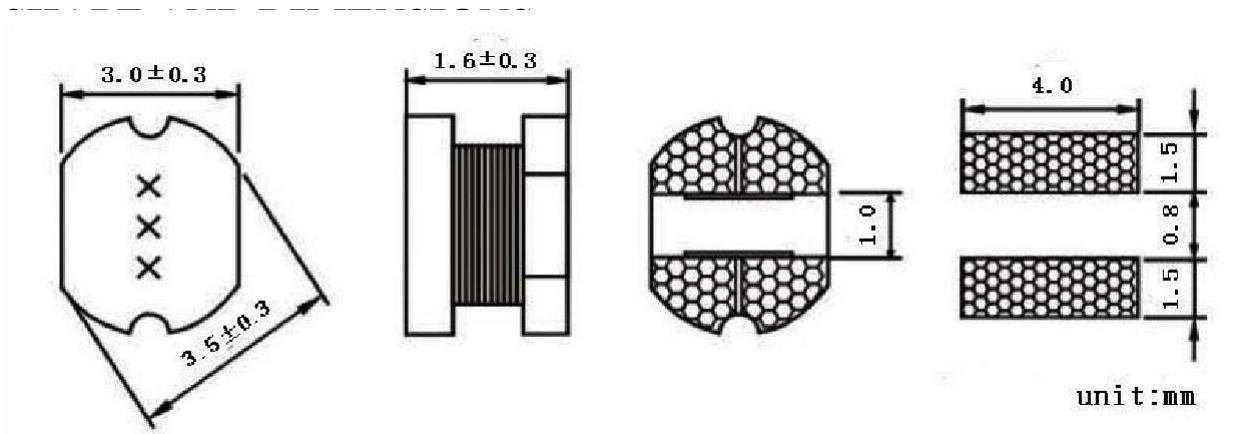
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■ Notes:

- Inductance instrument: HP4286A/CH1062A or LCR Meter equivalent.
- Inductance testing condition: 100KHz/1KHz.
- DCR instrument: TH2512B or DCR test equipment equivalent .
- Rated Current test: VR7210&VR113H.
- Rated Current definition: Inductance drop by 25% or temperature rise by 40°C the lesser of the minimum as the rated current.

JCD31



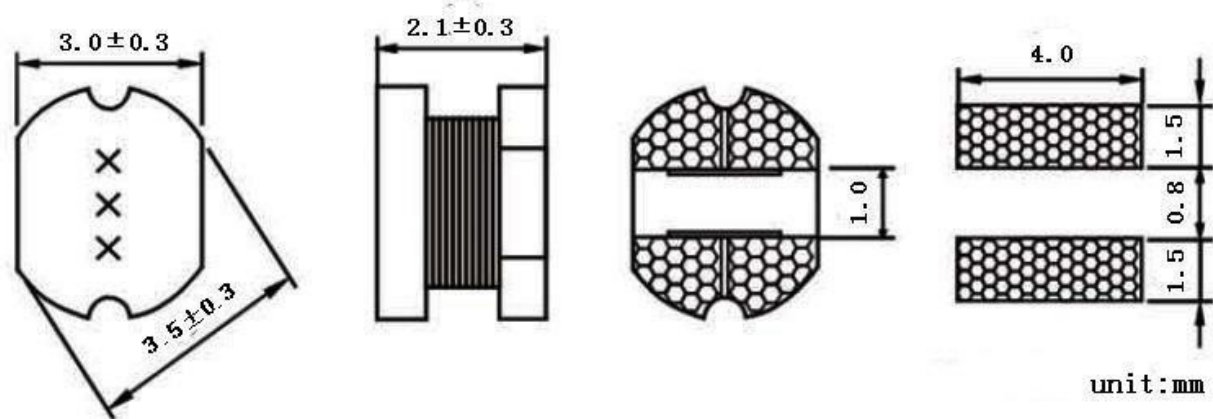
Electrical Characteristics JCD31 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD31-1R0M	1.0	± 20	100 kHz	0.058	1.55
JCD31-1R5M	1.5	± 20	100 kHz	0.065	1.40
JCD31-2R2M	2.2	± 20	100 kHz	0.085	1.30
JCD31-3R3M	3.3	± 20	100 kHz	0.115	1.20
JCD31-4R7M	4.7	± 20	100 kHz	0.170	1.00
JCD31-100K	10	± 10	100 kHz	0.350	0.78
JCD31-150K	15	± 10	100 kHz	0.550	0.60
JCD31-220K	22	± 10	100 kHz	0.890	0.46
JCD31-270K	27	± 10	100 kHz	1.050	0.43
JCD31-330K	33	± 10	100 kHz	1.250	0.40

Special inquiries besides the above common used types can be meet

JCD32

SHAPE AND DIMENSIONS



Electrical Characteristics JCD32 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD32-1R0M	1.0	± 20	100kHz	0.05	1.85
JCD32-1R5M	1.5	± 20	100kHz	0.06	1.85
JCD32-1R8M	1.8	± 20	100kHz	0.07	1.70
JCD32-2R2M	2.2	± 20	100kHz	0.08	1.60
JCD32-2R7M	2.7	± 20	100kHz	0.09	1.55
JCD32-3R3M	3.3	± 20	100kHz	0.10	1.40
JCD32-3R9M	3.9	± 20	100kHz	0.115	1.30
JCD32-4R7M	4.7	± 20	100kHz	0.165	1.25
JCD32-5R6M	5.6	± 20	100kHz	0.185	1.20
JCD32-6R8M	6.8	± 20	100kHz	0.21	1.10
JCD32-8R2M	8.2	± 20	100kHz	0.24	1.05
JCD32-100K	10	± 10	100kHz	0.35	0.850
JCD32-120K	12	± 10	100kHz	0.46	0.685
JCD32-150K	15	± 10	100kHz	0.50	0.635
JCD32-180K	18	± 10	100kHz	0.60	0.525
JCD32-220K	22	± 10	100kHz	0.65	0.500

Special inquiries besides the above common used types can be meet

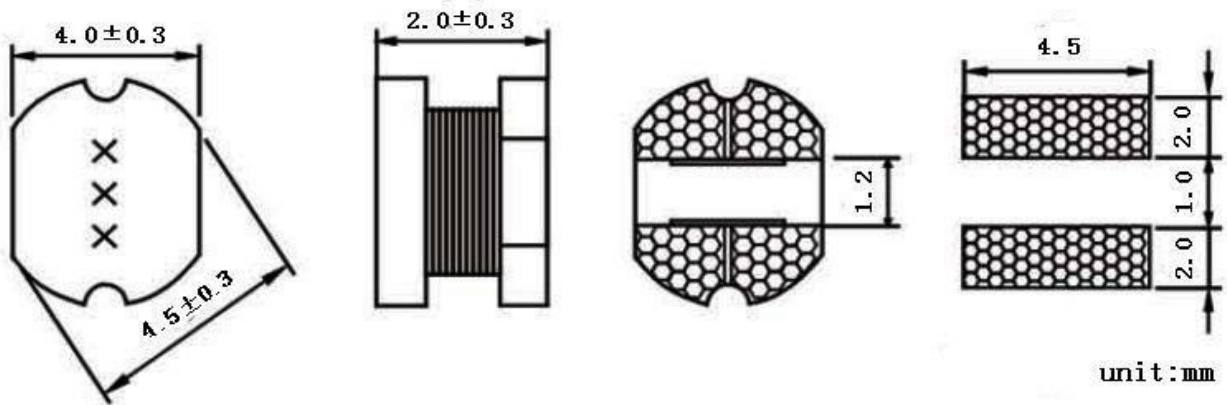
Electrical Characteristics JCD32 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD32-270K	27	±10	100kHz	0.75	0.405
JCD32-330K	33	±10	100kHz	0.85	0.380
JCD32-390K	39	±10	100kHz	1.00	0.355
JCD32-470K	47	±10	100kHz	1.60	0.330
JCD32-560K	56	±10	100kHz	1.65	0.290
JCD32-680K	68	±10	100kHz	1.85	0.275
JCD32-820K	82	±10	100kHz	2.10	0.250
JCD32-101K	100	±10	1kHz	2.20	0.220
JCD32-151K	150	±10	1kHz	4.00	0.170
JCD32-221K	220	±10	1kHz	7.20	0.15

Special inquiries besides the above common used types can be meet

JCD42

SHAPE AND DIMENSIONS



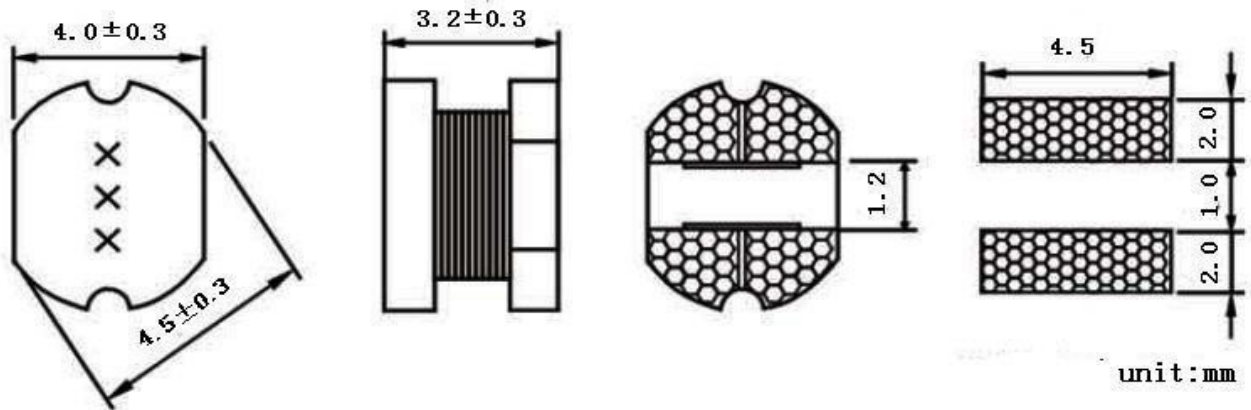
Electrical Characteristics JCD42 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD42-1R0M	1.0	± 20	100kHz	0.050	3.00
JCD42-1R5M	1.5	± 20	100kHz	0.055	2.80
JCD42-2R2M	2.2	± 20	100kHz	0.070	2.50
JCD42-3R3M	3.3	± 20	100kHz	0.085	2.25
JCD42-4R7M	4.7	± 20	100kHz	0.120	1.80
JCD42-6R8M	6.8	± 20	100kHz	0.170	1.40
JCD42-8R2M	8.2	± 20	100kHz	0.200	1.20
JCD42-100K	10	± 10	100kHz	0.210	1.00
JCD42-150K	15	± 10	100kHz	0.300	0.82
JCD42-220K	22	± 10	100kHz	0.450	0.60
JCD42-270K	27	± 10	100kHz	0.600	0.55
JCD42-330K	33	± 10	100kHz	0.500	0.44
JCD42-390K	39	± 10	100kHz	0.750	0.41
JCD42-470K	47	± 10	100kHz	0.920	0.38
JCD42-560K	56	± 10	100kHz	1.200	0.35
JCD42-680K	68	± 10	100kHz	1.350	0.31
JCD42-101K	100	± 10	1kHz	2.100	0.25
JCD42-121K	120	± 10	1kHz	2.700	0.22
JCD42-151K	150	± 10	1kHz	3.100	0.19
JCD42-181K	180	± 10	1kHz	3.700	0.18
JCD42-221K	220	± 10	1kHz	4.200	0.17
JCD42-331K	330	± 10	1kHz	6.500	0.14
JCD42-471K	470	± 10	1kHz	7.400	0.12

Special inquiries besides the above common used types can be meet

JCD43

SHAPE AND DIMENSIONS



Electrical Characteristics JCD43 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD43-1R0M	1.0	± 20	100kHz	0.045	3.50
JCD43-2R2M	2.2	± 20	100kHz	0.070	2.60
JCD43-3R3M	3.3	± 20	100kHz	0.085	2.43
JCD43-3R9M	3.9	± 20	100kHz	0.090	1.70
JCD43-4R7M	4.7	± 20	100kHz	0.105	1.65
JCD43-5R6M	5.6	± 20	100kHz	0.120	1.60
JCD43-6R8M	6.8	± 20	100kHz	0.130	1.41
JCD43-8R2M	8.2	± 20	100kHz	0.145	1.30
JCD43-100K	10	± 10	100kHz	0.180	1.10
JCD43-120K	12	± 10	100kHz	0.210	1.00
JCD43-150K	15	± 10	100kHz	0.235	0.85
JCD43-180K	18	± 10	100kHz	0.330	0.80
JCD43-220K	22	± 10	100kHz	0.360	0.70
JCD43-270K	27	± 10	100kHz	0.520	0.65
JCD43-330K	33	± 10	100kHz	0.540	0.60
JCD43-390K	39	± 10	100kHz	0.580	0.55

Special inquiries besides the above common used types can be meet

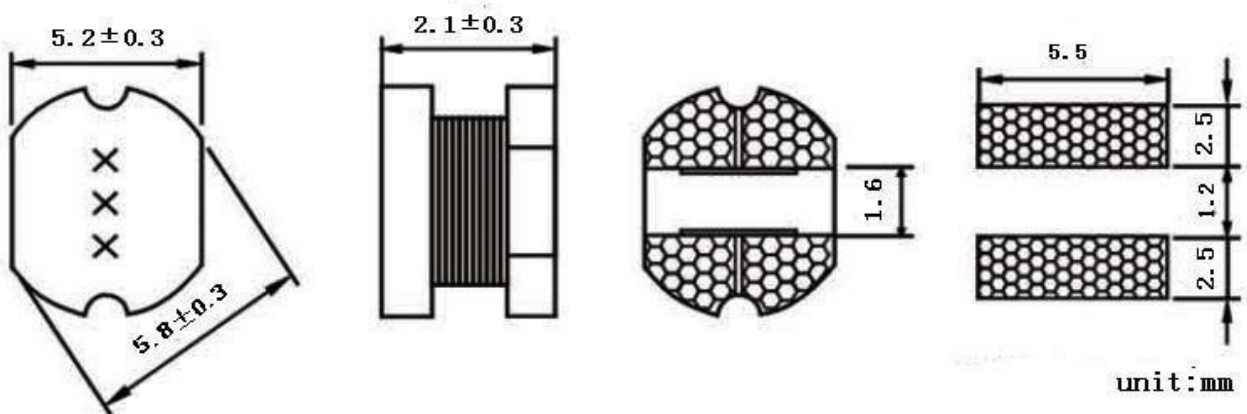
Electrical Characteristics JCD43 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD43-470K	47	±10	100kHz	0.840	0.48
JCD43-560K	56	±10	100kHz	0.930	0.46
JCD43-680K	68	±10	100kHz	1.110	0.44
JCD43-820K	82	±10	100kHz	1.250	0.42
JCD43-101K	100	±10	1kHz	1.400	0.40
JCD43-151K	151	±10	1kHz	2.00	0.35
JCD43-221K	220	±10	1kHz	2.460	0.27
JCD43-331K	330	±10	1kHz	4.500	0.20
JCD43-471K	470	±10	1kHz	5.500	0.16
JCD43-561K	560	±10	1kHz	6.000	0.14
JCD43-681K	680	±10	1kHz	6.800	0.13
JCD43-821K	820	±10	1kHz	8.000	0.12
JCD43-102K	1000	±10	1kHz	9.000	0.10

Special inquiries besides the above common used types can be meet

JCD52

SHAPE AND DIMENSIONS



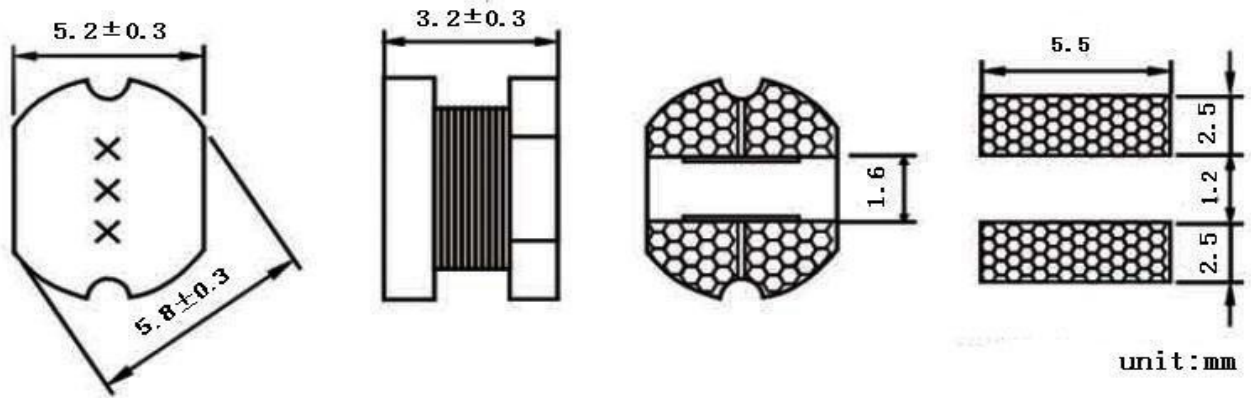
Electrical Characteristics JCD52 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD52-1R0M	1.0	± 20	100kHz	0.030	2.50
JCD52-1R5M	1.5	± 20	100kHz	0.040	2.10
JCD52-2R2M	2.2	± 20	100kHz	0.070	2.00
JCD52-3R3M	3.3	± 20	100kHz	0.080	1.60
JCD52-4R7M	4.7	± 20	100kHz	0.093	1.30
JCD52-5R6M	5.6	± 20	100kHz	0.115	1.10
JCD52-6R8M	6.8	± 20	100kHz	0.150	1.00
JCD52-100K	10	± 10	100kHz	0.170	0.90
JCD52-150K	15	± 10	100kHz	0.330	0.72
JCD52-220K	22	± 10	100kHz	0.400	0.60
JCD52-330K	33	± 10	100kHz	0.540	0.50
JCD52-470K	47	± 10	100kHz	0.690	0.40
JCD52-680K	68	± 10	100kHz	1.180	0.37
JCD52-101K	100	± 10	1kHz	1.800	0.27
JCD52-151K	150	± 10	1kHz	2.750	0.23
JCD52-221K	220	± 10	1kHz	3.200	0.20

Special inquiries besides the above common used types can be meet

JCD53

SHAPE AND DIMENSIONS



Electrical Characteristics JCD53 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD53-1R0M	1	± 20	100kHz	0.030	3
JCD53-2R2M	2.2	± 20	100kHz	0.030	2.7
JCD53-3R3M	3.3	± 20	100kHz	0.050	2.3
JCD53-4R7M	4.7	± 20	100kHz	0.070	2
JCD53-6R8M	6.8	± 20	100kHz	0.090	1.5
JCD53-8R2M	8.2	± 20	100kHz	0.100	1.3
JCD53-100K	10	± 20	100kHz	0.120	1.27
JCD53-120K	12	± 10	100kHz	0.130	1.1
JCD53-150K	15	± 10	100kHz	0.150	1.06
JCD53-180K	18	± 10	100kHz	0.180	1
JCD53-220K	22	± 10	100kHz	0.220	0.85
JCD53-330K	33	± 10	100kHz	0.300	0.7
JCD53-470K	47	± 10	100kHz	0.430	0.58

Special inquiries besides the above common used types can be meet

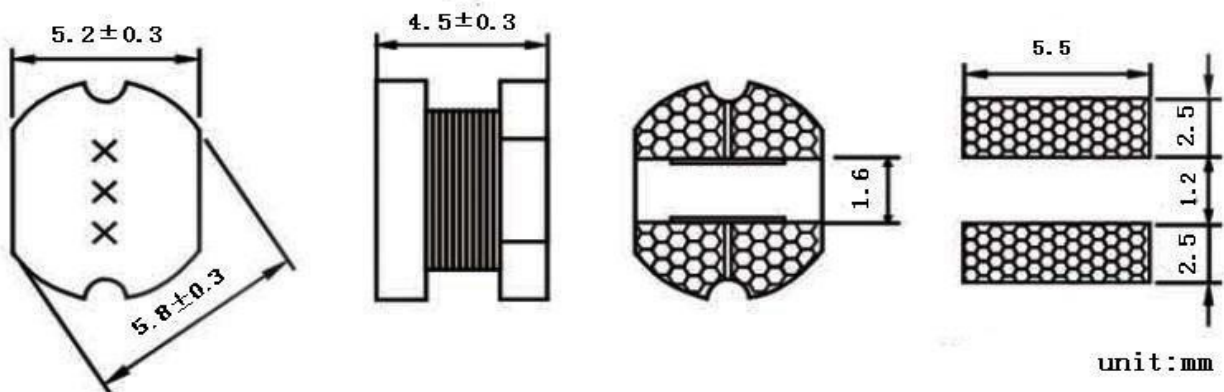
Electrical Characteristics JCD53 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD53-560K	56	±10	100kHz	0.50	0.56
JCD53-680K	68	±10	100kHz	0.60	0.51
JCD53-820K	82	±10	100kHz	0.80	0.46
JCD53-101K	100	±10	1kHz	0.90	0.44
JCD53-151K	150	±10	1kHz	1.30	0.33
JCD53-181K	180	±10	1kHz	1.50	0.3
JCD53-221K	220	±10	1kHz	2.00	0.28
JCD53-271K	270	±10	1kHz	2.50	0.35
JCD53-331K	330	±10	1kHz	3.20	0.21
JCD53-471K	470	±10	1kHz	4.20	0.18
JCD53-561K	560	±10	1kHz	4.50	0.18
JCD53-681K	680	±10	1kHz	6.00	0.16
JCD53-821K	820	±10	1kHz	6.50	0.15
JCD53-102K	1000	±10	1kHz	8.00	0.13

Special inquiries besides the above common used types can be meet

JCD54

SHAPE AND DIMENSIONS



Electrical Characteristics JCD54 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD54-R47M	0.47	± 20	100kHz	0.012	4.80
JCD54-1R0M	1.0	± 20	100kHz	0.025	3.50
JCD54-2R2M	2.2	± 20	100kHz	0.028	3.20
JCD54-3R3M	3.3	± 20	100kHz	0.035	2.50
JCD54-4R7M	4.7	± 20	100kHz	0.038	2.50
JCD54-6R8M	6.8	± 20	100kHz	0.070	2.00
JCD54-8R2M	8.2	± 20	100kHz	0.090	1.70
JCD54-100K	10	± 10	100kHz	0.10	1.65
JCD54-120K	12	± 10	100kHz	0.12	1.55
JCD54-150K	15	± 10	100kHz	0.14	1.40
JCD54-180K	18	± 10	100kHz	0.15	1.25
JCD54-220K	22	± 10	100kHz	0.18	1.10
JCD54-270K	27	± 10	100kHz	0.20	0.95
JCD54-330K	33	± 10	100kHz	0.22	0.90
JCD54-390K	39	± 10	100kHz	0.30	0.80
JCD54-470K	47	± 10	100kHz	0.35	0.75
JCD54-560K	56	± 10	100kHz	0.40	0.70
JCD54-680K	68	± 10	100kHz	0.45	0.65
JCD54-820K	82	± 10	100kHz	0.60	0.60
JCD54-101K	100	± 10	1kHz	0.70	0.55
JCD54-121K	120	± 10	1kHz	0.85	0.45
JCD54-151K	150	± 10	1kHz	1.10	0.43
JCD54-181K	180	± 10	1kHz	1.35	0.40
JCD54-221K	220	± 10	1kHz	1.55	0.35
JCD54-331K	330	± 10	1kHz	1.98	0.30
JCD54-471K	470	± 10	1kHz	2.50	0.25
JCD54-561K	560	± 10	1kHz	2.87	0.20
JCD54-681K	680	± 10	1kHz	3.50	0.18
JCD54-821K	820	± 10	1kHz	5.20	0.17

Special inquiries besides the above common used types can be meet

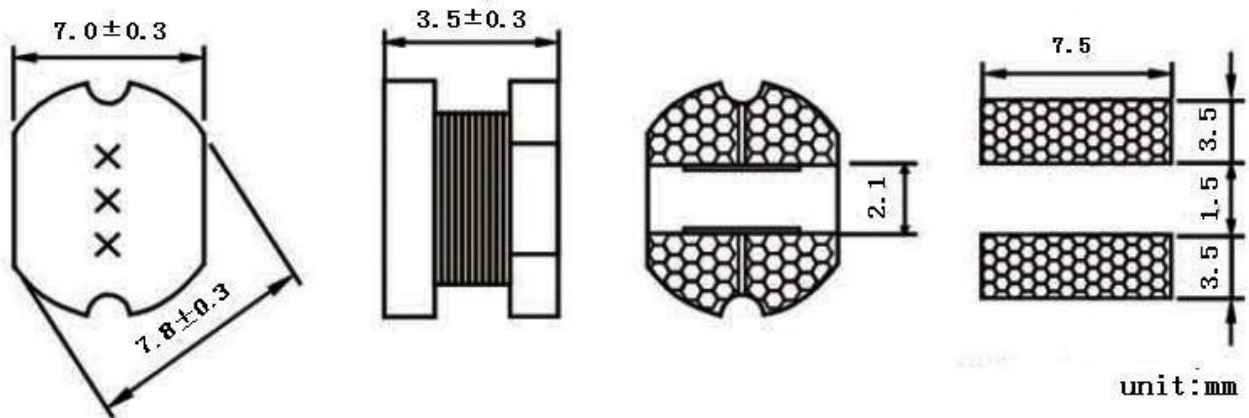
Electrical Characteristics JCD54 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD54-102K	1000	±10	1kHz	5.50	0.15

Special inquiries besides the above common used types can be meet

JCD73

SHAPE AND DIMENSIONS



Electrical Characteristics JCD73 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD73-1R0M	1.0	±20	100kHz	0.02	5.20
JCD73-2R2M	2.2	±20	100kHz	0.025	4.80
JCD73-2R5M	2.5	±20	100kHz	0.025	4.80
JCD73-3R3M	3.3	±20	100kHz	0.035	4.00
JCD73-4R7M	4.7	±20	100kHz	0.048	3.00
JCD73-6R8M	6.8	±20	100kHz	0.05	2.20
JCD73-100K	10	±10	100kHz	0.080	2.10
JCD73-120K	12	±10	100kHz	0.090	1.80

Special inquiries besides the above common used types can be meet

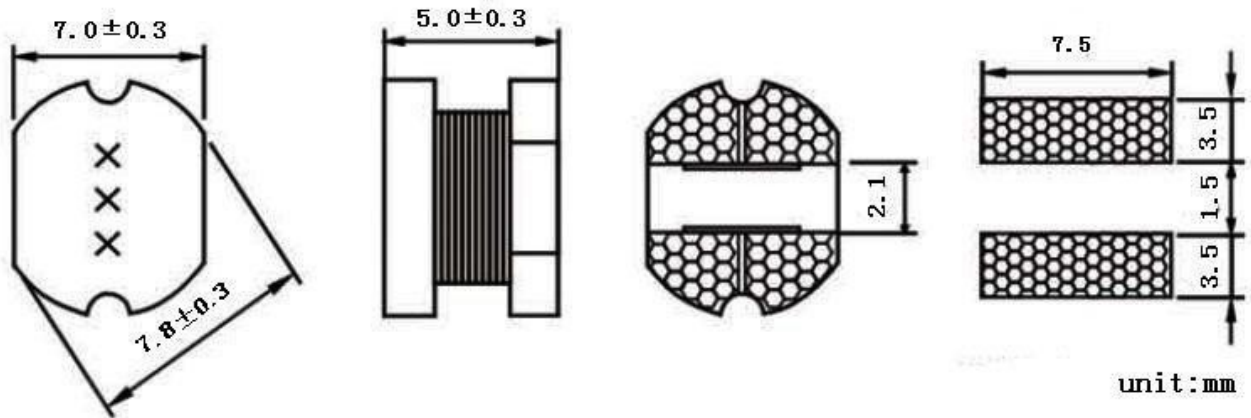
Electrical Characteristics JCD73 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD73-150K	15	± 10	100kHz	0.095	1.70
JCD73-180K	18	± 10	100kHz	0.110	1.40
JCD73-220K	22	± 10	100kHz	0.156	1.35
JCD73-270K	27	± 10	100kHz	0.145	1.25
JCD73-330K	33	± 10	100kHz	0.170	1.05
JCD73-390K	39	± 10	100kHz	0.215	0.95
JCD73-470K	47	± 10	100kHz	0.305	0.90
JCD73-560K	56	± 10	100kHz	0.280	0.80
JCD73-680K	68	± 10	100kHz	0.330	0.75
JCD73-820K	82	± 10	100kHz	0.405	0.70
JCD73-101K	100	± 10	1kHz	0.480	0.65
JCD73-121K	120	± 10	1kHz	0.535	0.60
JCD73-151K	150	± 10	1kHz	0.750	0.55
JCD73-181K	180	± 10	1kHz	1.020	0.50
JCD73-221K	220	± 10	1kHz	1.200	0.45
JCD73-271K	270	± 10	1kHz	1.300	0.37
JCD73-331K	330	± 10	1kHz	1.490	0.35
JCD73-471K	470	± 10	1kHz	2.200	0.30
JCD73-561K	560	± 10	1kHz	2.400	0.25

Special inquiries besides the above common used types can be meet

JCD75

SHAPE AND DIMENSIONS



Electrical Characteristics JCD75 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD75-1R0M	1.0	± 20	100kHz	0.015	5.80
JCD75-2R2M	2.2	± 20	100kHz	0.023	5.20
JCD75-3R3M	3.3	± 20	100kHz	0.025	4.80
JCD75-4R7M	4.7	± 20	100kHz	0.040	4.00
JCD75-6R8M	6.8	± 20	100kHz	0.041	3.00
JCD75-8R2M	8.2	± 20	100kHz	0.042	2.70
JCD75-100K	10	± 10	100kHz	0.07	2.55
JCD75-120K	12	± 10	100kHz	0.08	2.40
JCD75-150K	15	± 10	100kHz	0.09	2.00
JCD75-180K	18	± 10	100kHz	0.10	1.95
JCD75-220K	22	± 10	100kHz	0.11	1.70
JCD75-270K	27	± 10	100kHz	0.12	1.55

Special inquiries besides the above common used types can be meet

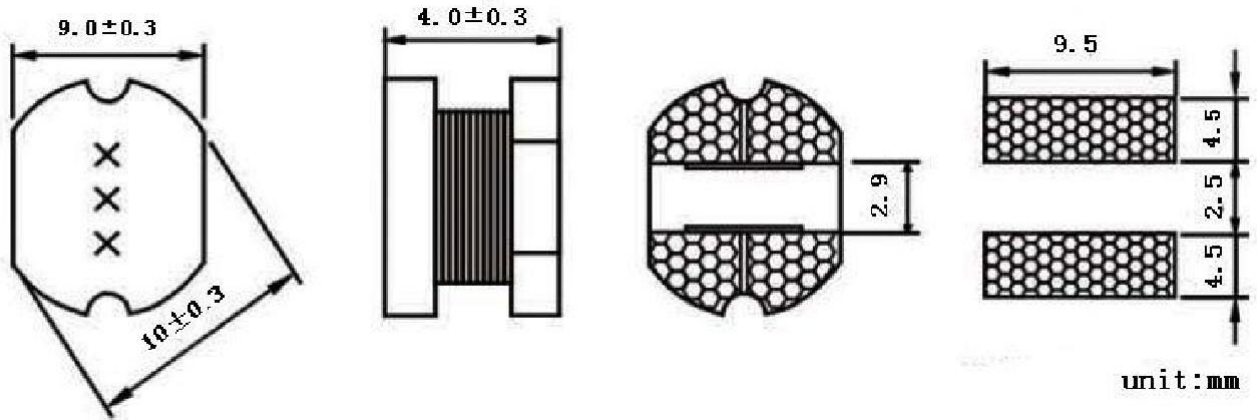
Electrical Characteristics JCD75 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD75-330K	33	± 10	100kHz	0.13	1.40
JCD75-390K	39	± 10	100kHz	0.15	1.35
JCD75-470K	47	± 10	100kHz	0.19	1.25
JCD75-560K	56	± 10	100kHz	0.23	1.10
JCD75-680K	68	± 10	100kHz	0.25	1.00
JCD75-820K	82	± 10	100kHz	0.35	0.95
JCD75-101K	100	± 10	1kHz	0.40	0.78
JCD75-121K	120	± 10	1kHz	0.45	0.73
JCD75-151K	150	± 10	1kHz	0.60	0.70
JCD75-181K	180	± 10	1kHz	0.70	0.60
JCD75-221K	220	± 10	1kHz	0.95	0.55
JCD75-271K	270	± 10	1kHz	1.10	0.50
JCD75-331K	330	± 10	1kHz	1.25	0.45
JCD75-391K	390	± 10	1kHz	1.75	0.40
JCD75-471K	470	± 10	1kHz	1.95	0.35
JCD75-681K	680	± 10	1kHz	2.18	0.27
JCD75-102K	1000	± 10	1kHz	3.85	0.20
JCD75-152K	1500	± 10	1kHz	4.55	0.15
JCD75-222K	2200	± 10	1kHz	5.12	0.10

Special inquiries besides the above common used types can be meet

JCD104

SHAPE AND DIMENSIONS



Electrical Characteristics JCD104 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD104-100K	10	± 10	100kHz	0.05	2.38
JCD104-120K	12	± 10	100kHz	0.06	2.13
JCD104-150K	15	± 10	100kHz	0.07	1.87
JCD104-180K	18	± 10	100kHz	0.08	1.73
JCD104-220K	22	± 10	100kHz	0.09	1.60
JCD104-270K	27	± 10	100kHz	0.10	1.44
JCD104-330K	33	± 10	100kHz	0.12	1.26
JCD104-390K	39	± 10	100kHz	0.15	1.20
JCD104-470K	47	± 10	100kHz	0.17	1.10
JCD104-560K	56	± 10	100kHz	0.20	1.01
JCD104-680K	68	± 10	100kHz	0.22	0.91
JCD104-820K	82	± 10	100kHz	0.25	0.85
JCD104-101K	100	± 10	1kHz	0.34	0.74
JCD104-121K	120	± 10	1kHz	0.40	0.69
JCD104-151K	150	± 10	1kHz	0.54	0.61

Special inquiries besides the above common used types can be meet

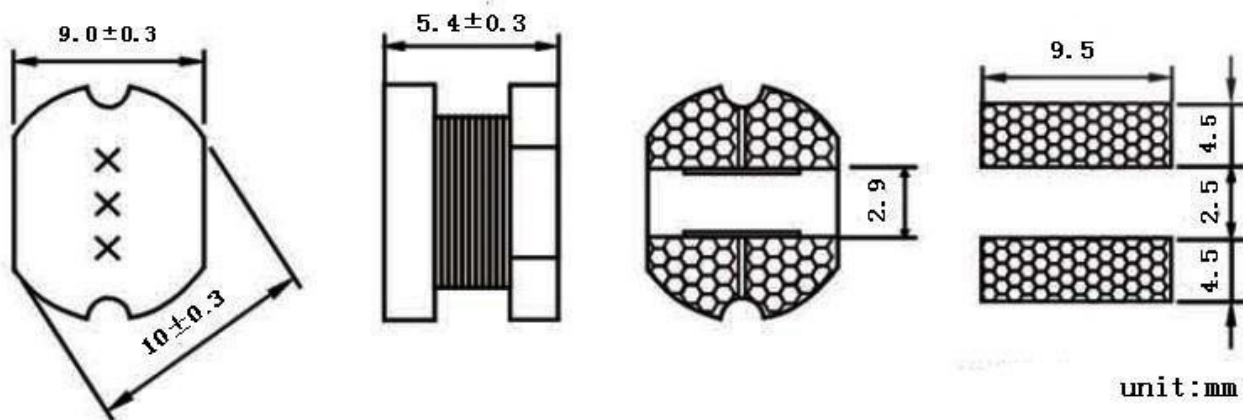
Electrical Characteristics JCD104 Series

Part NO	Inductance (μH)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD104-181K	180	±10	1kHz	0.62	0.56
JCD104-221K	220	±10	1kHz	0.72	0.53
JCD104-271K	270	±10	1kHz	0.95	0.45
JCD104-331K	330	±10	1kHz	1.10	0.42
JCD104-391K	390	±10	1kHz	1.24	0.38
JCD104-471K	470	±10	1kHz	1.53	0.35
JCD104-561K	560	±10	1kHz	1.90	0.32
JCD104-681K	680	±10	1kHz	2.20	0.31
JCD104-821K	820	±10	1kHz	2.70	0.30

Special inquiries besides the above common used types can be meet

JCD105

SHAPE AND DIMENSIONS



Electrical Characteristics JCD105 Series

Part NO	Inductance (μ H)	Tolerance(%)	Test Freq.	DCR(Ω)Max	Isat(A)
JCD105-1R0M	1	± 20	100kHz	0.009	8.63
JCD105-2R2M	2.2	± 20	100kHz	0.016	7.20
JCD105-3R3M	3.3	± 20	100kHz	0.018	6.50
JCD105-4R7M	4.7	± 20	100kHz	0.020	5.50
JCD105-6R8M	6.8	± 20	100kHz	0.040	4.50
JCD105-100K	10	± 10	100kHz	0.060	2.60
JCD105-120K	12	± 10	100kHz	0.070	2.45
JCD105-150K	15	± 10	100kHz	0.080	2.27
JCD105-180K	18	± 10	100kHz	0.090	2.15
JCD105-220K	22	± 10	100kHz	0.100	1.95
JCD105-270K	27	± 10	100kHz	0.110	1.76
JCD105-330K	33	± 10	100kHz	0.120	1.50
JCD105-390K	39	± 10	100kHz	0.140	1.37
JCD105-470K	47	± 10	100kHz	0.170	1.28
JCD105-560K	56	± 10	100kHz	0.190	1.17
JCD105-680K	68	± 10	100kHz	0.220	1.11
JCD105-820K	82	± 10	100kHz	0.250	1.00
JCD105-101K	100	± 10	1kHz	0.350	0.97
JCD105-121K	120	± 10	1kHz	0.400	0.89
JCD105-151K	150	± 10	1kHz	0.470	0.78
JCD105-181K	180	± 10	1kHz	0.630	0.72
JCD105-221K	220	± 10	1kHz	0.730	0.66
JCD105-271K	270	± 10	1kHz	0.970	0.57
JCD105-331K	330	± 10	1kHz	1.150	0.52
JCD105-391K	390	± 10	1kHz	1.300	0.48
JCD105-471K	470	± 10	1kHz	1.480	0.42
JCD105-561K	560	± 10	1kHz	1.900	0.33
JCD105-681K	680	± 10	1kHz	2.250	0.28
JCD105-102K	1000	± 10	1kHz	2.550	0.24

Special inquiries besides the above common used types can be meet

TYPE PACKAGING

TYPE	QUANTITIES PCS/reel	TYPE	QUANTITIES PCS/reel
JCD31	3000	JCD54	1500
JCD32	3000	JCD73	1000
JCD42	3000	JCD75	1000
JCD43	2000	JCD104	1000
JCD52	2000	JCD105	1000
JCD53	2000	XXX	XXX