

Drum Core Surface Mount Unshielded Power Inductors

◆ Features

1. Excellent solderability and high heat resistance.
2. Excellent terminal strength construction.
3. Packed in embossed carrier tape and can be used by automatic mounting machine.

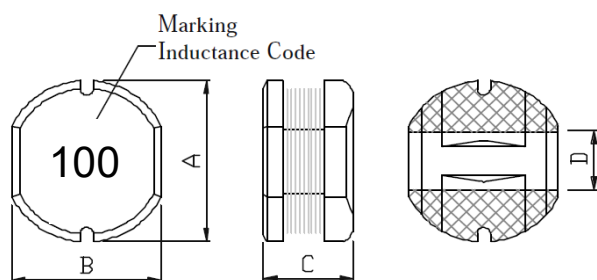


◆ Applications

Power supply for VCR,OA equipment ,LCD television set notebook, DC to DC converters, DC to AC inverters etc.



◆ Shape & Dimensions



◆ Lead Free Part Numbering

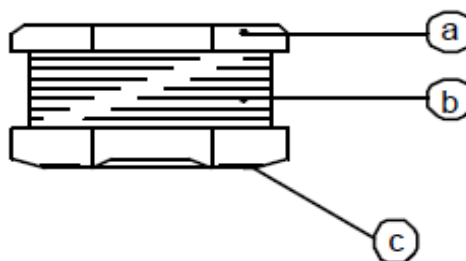
INCD 0302 100 M T
(1) (2) (3) (4) (5)

- (1) Series Type
- (2) Dimension: A X C
- (3) Inductance: 2R2=2.2μH;
100=10μH; 101=100μH
- (4) Inductance Tolerance: K=±10%, M=±20%
- (5) Company Code
- (6) Packaging : packed in embossed carrier tape

Series	A (mm)	B (mm)	C (mm)	D (mm)
INCD0302F	3.5±0.3	3.0±0.3	2.1±0.3	1.0 Typ

◆ Material

Item	Material
a. Core	Ferrite DR Core
b. Wire	Enamelled Copper wire
c.Terminal	Ag+Sn+SnPb



◆ Specification

Part Number 料号	Inductance(μ H) 电感量	Test Freq 测试频率	DCR(Ω) Typ. 直流电阻	IDC (A) Max. 额定电流
INCD0302F Series:				
INCD0302F1R0MT	1.0 $\pm$ 20%	100KHz/0.25V	0.035	3.34
INCD0302F1R5MT	1.5 $\pm$ 20%	100KHz/0.25V	0.060	2.50
INCD0302F1R8MT	1.8 $\pm$ 20%	100KHz/0.25V	0.090	2.30
INCD0302F2R2MT	2.2 $\pm$ 20%	100KHz/0.25V	0.120	2.00
INCD0302F3R3MT	3.3 $\pm$ 20%	100KHz/0.25V	0.158	1.55
INCD0302F4R7MT	4.7 $\pm$ 20%	100KHz/0.25V	0.172	1.50
INCD0302F5R6MT	5.6 $\pm$ 20%	100KHz/0.25V	0.192	1.35
INCD0302F6R8MT	6.8 $\pm$ 20%	100KHz/0.25V	0.219	1.20
INCD0302F8R2MT	8.2 $\pm$ 20%	100KHz/0.25V	0.247	1.15
INCD0302F100MT	10 $\pm$ 20%	100KHz/0.25V	0.286	1.05
INCD0302F150MT	15 $\pm$ 20%	100KHz/0.25V	0.468	0.95
INCD0302F220MT	22 $\pm$ 20%	100KHz/0.25V	0.611	0.90
INCD0302F330MT	33 $\pm$ 20%	100KHz/0.25V	0.962	0.85
INCD0302F470MT	47 $\pm$ 20%	100KHz/0.25V	1.500	0.80
INCD0302F680MT	68 $\pm$ 20%	100KHz/0.25V	2.000	0.78
INCD0302F820MT	82 $\pm$ 20%	100KHz/0.25V	2.500	0.76
INCD0302F101MT	100 $\pm$ 20%	100KHz/0.25V	3.000	0.75
INCD0302F151MT	150 $\pm$ 20%	100KHz/0.25V	4.000	0.73
INCD0302F221MT	220 $\pm$ 20%	100KHz/0.25V	5.500	0.70
INCD0302F331MT	330 $\pm$ 20%	100KHz/0.25V	7.000	0.70
INCD0302F471MT	470 $\pm$ 20%	100KHz/0.25V	12.000	0.69

◆ Note

- (1) Maximum allowable DC current is that which causes a 10% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
- (2) Operating temperature -55°C ~ +125°C.
- (3) All test data is referenced to 25°C ambient.

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(1) Features

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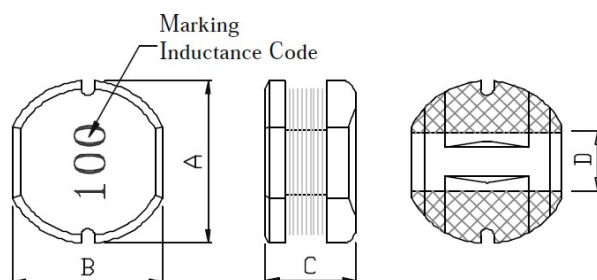


◆ Applications

Power supply for VCR,OA equipment ,LCD television set notebook, DC to DC converters, DC to AC inverters etc.



◆ Part Numbering



Shape & Dimensions

◆ Lead Free

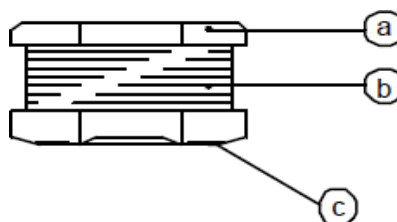
INCD 0403 F 100 M T
(1) (2) (3) (4) (5) (6)

- (1) Series Type
- (2) Dimension: A X C
- (3) Material:ferrite
- (4) Inductance: 2R2=2.2 μ H;
100=10 μ H; 101=100 μ H
- (5) Inductance Tolerance: K= $\pm 10\%$, M= $\pm 20\%$
- (6) Packing : packed in embossed carrier tape

Series	A (mm)	B(mm)	C(mm)	D(mm)
INCD0403F	4.5 $\pm$ 0.3	4.0 $\pm$ 0.3	3.2 $\pm$ 0.3	1.2 Typ.

◆ Material

Item	Material
a. Core	Ferrite DR Core
b. Wire	Enamelled Copper wire
c.Terminal	Ag+Sn+SnPb



◆ Specification

Part Number 料号	Inductance(μ H) 电感量	Test Freq 测试频率	DCR(Ω) Typ. 直流电阻	IDC (A) max. 额定电流
RSCD4532 Series				
INCD0403F1R0MT	1.00 $\pm$ 20%	100KHz/0.25V	0.033	3.8
INCD0403F1R5MT	1.50 $\pm$ 20%	100KHz/0.25V	0.039	3.22
INCD0403F2R2MT	2.20 $\pm$ 20%	100KHz/0.25V	0.047	2.9
INCD0403F3R3MT	3.30 $\pm$ 20%	100KHz/0.25V	0.058	2.15
INCD0403F3R9MT	3.90 $\pm$ 20%	100KHz/0.25V	0.076	1.98
INCD0403F4R7MT	4.70 $\pm$ 20%	100KHz/0.25V	0.094	1.8
INCD0403F5R6MT	5.60 $\pm$ 20%	100KHz/0.25V	0.101	1.7
INCD0403F6R8MT	6.80 $\pm$ 20%	100KHz/0.25V	0.117	1.51
INCD0403F8R2MT	8.20 $\pm$ 20%	100KHz/0.25V	0.132	1.46
INCD0403F100MT	10.0 $\pm$ 20%	100KHz/0.25V	0.182	1.35
INCD0403F120MT	12.0 $\pm$ 20%	100KHz/0.25V	0.21	1.05
INCD0403F150MT	15.0 $\pm$ 20%	100KHz/0.25V	0.235	0.92
INCD0403F220MT	22.0 $\pm$ 20%	100KHz/0.25V	0.378	0.76
INCD0403F330MT	33.0 $\pm$ 20%	100KHz/0.25V	0.54	0.64
INCD0403F390MT	39.0 $\pm$ 20%	100KHz/0.25V	0.587	0.59
INCD0403F470MT	47.0 $\pm$ 20%	100KHz/0.25V	0.844	0.54
INCD0403F560MT	56.0 $\pm$ 20%	100KHz/0.25V	0.937	0.5
INCD0403F680MT	68.0 $\pm$ 20%	100KHz/0.25V	1.117	0.46
INCD0403F820MT	82.0 $\pm$ 20%	100KHz/0.25V	1.345	0.45
INCD0403F101MT	100.0 $\pm$ 20%	100KHz/0.25V	1.52	0.44
INCD0403F121MT	120.0 $\pm$ 20%	100KHz/0.25V	1.8	0.43
INCD0403F151MT	150.0 $\pm$ 20%	100KHz/0.25V	2	0.42
INCD0403F181MT	180.0 $\pm$ 20%	100KHz/0.25V	3.2	0.38
INCD0403F221MT	220.0 $\pm$ 20%	100KHz/0.25V	3.4	0.36
INCD0403F271MT	270.0 $\pm$ 20%	100KHz/0.25V	3.9	0.34
INCD0403F331MT	330.0 $\pm$ 20%	100KHz/0.25V	5.3	0.28
INCD0403F391MT	390.0 $\pm$ 20%	100KHz/0.25V	5.9	0.24
INCD0403F471MT	470.0 $\pm$ 20%	100KHz/0.25V	6.8	0.21
INCD0403F561MT	560.0 $\pm$ 20%	100KHz/0.25V	8.5	0.2
INCD0403F681MT	680.0 $\pm$ 20%	100KHz/0.25V	10	0.18
INCD0403F821MT	820.0 $\pm$ 20%	100KHz/0.25V	13.4	0.15

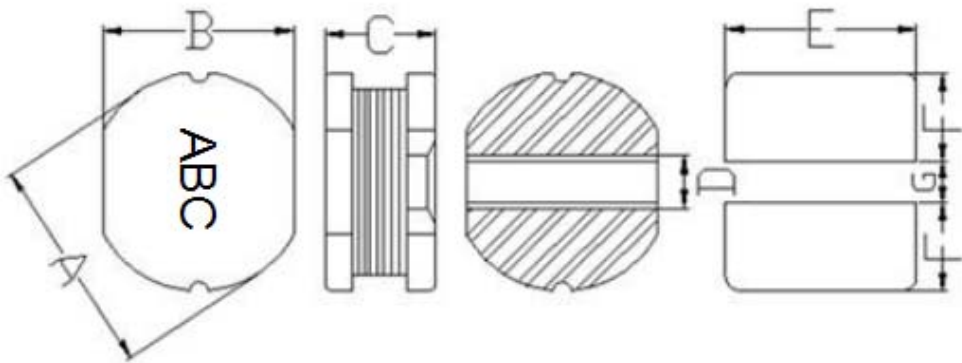
◆ Note

- ◆ Maximum allowable DC current is that which causes a 10% inductance reduction from the initial value, or coil temperature to rise by 40°C, whichever is smaller. (Reference ambient temperature 20°C).
- ◆ Operating temperature -55°C ~ +125°C.
- ◆ All test data is referenced to 25°C ambient.

文件编号 File Number	SRD-WI-5362	版本号 Version Number	A	页码 page	1/4
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1、外形尺寸 Dimension：

单位Unit: mm

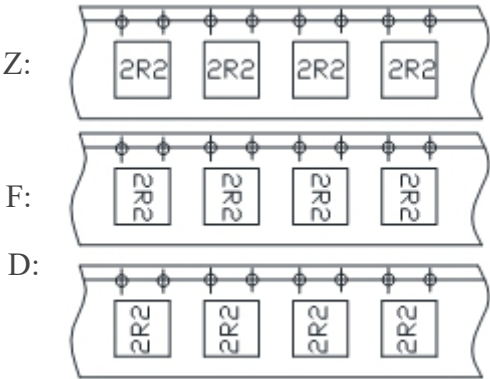


A	5.8±0.3
B	5.2±0.3
C	3.0±0.3
D	1.6Ref.
E	5.8Ref.
F	2.2Ref.
G	1.6Ref.

2、产品品名构成 Product Spec. Model

INCD 0503 F 2R2 M T
a b c d e f

▶ Lettering direction



- a: 系列名称Series name
- b: 产品尺寸Product dimensions (A x B x C)
- C: 材质Material(F: 铁氧体 Ferrite)
- d: 电感值Inductance Value
(1R0:1.0uH; 100: 10uH; 101:100uH)
- e: 电感公差Inductance Tolerance (K:10% ; M:20% ; N:30%)
- f: 包装方式Packing: 盘装

3、结构Structure



4、材料清单MATERIAL LIST

NO.	PARTS	MATERIAL	UL FILE NO.	TEMP. CLASS
1	DRUM CORE	Ni-Zn CORE OR EQUIVALENT	NA	NA
2	WIRE	POLYURETHANE ENAMELLED COPPER WIRE OR EQUIVALENT	E258243	180℃
3	SOLDER	Sn99.3-Cu0.7 OR EQUIVALENT	NA	NA

*NA:NOT APPLICABLE.

文件编号 File Number	SRD-WI-5362	版本号 Version Number	A	页码 page	2/4	
5、电性能参数表 Electrical Characteristics List						
规格型号 Part NO.	电感量 Tolerance(μH)	测试频率 Test Freq. (kHz/v)	直流电阻 DCR Max (Ω)	饱和电流 Isat (A)	线径WIRE (φ/mm)	圈数TS (Ref)
INCD0503F1R0MT	1.0	100 / 0.25	0.017	3.70	0.27*2	5.5
INCD0503F-1R5MT	1.5	100 / 0.25	0.020	3.50	0.27*2	6.5
INCD0503F-1R8MT	1.8	100 / 0.25	0.022	3.00	0.25*2	7.5
INCD0503F-2R2MT	2.2	100 / 0.25	0.026	2.85	0.25*2	8.5
INCD0503F-2R5MT	2.5	100 / 0.25	0.034	2.70	0.25*2	9.5
INCD0503F-3R3MT	3.3	100 / 0.25	0.040	2.40	0.23*2	10.5
INCD0503F-3R9MT	3.9	100 / 0.25	0.046	2.25	0.23*2	11.5
INCD0503F-4R7MT	4.7	100 / 0.25	0.052	1.90	0.20*2	12.5
INCD0503F-5R6MT	5.6	100 / 0.25	0.058	1.88	0.20*2	13.5
INCD0503F-6R8MT	6.8	100 / 0.25	0.071	1.87	0.20*2	15.5
INCD0503F-8R2MT	8.2	100 / 0.25	0.081	1.82	0.19*2	16.5
INCD0503F-100KT	10	100 / 0.25	0.094	1.78	0.25	18.5
INCD0503F-120KT	12	100 / 0.25	0.126	1.60	0.25	20.5
INCD0503F-150KT	15	100 / 0.25	0.139	1.58	0.25	23.5
INCD0503F-180KT	18	100 / 0.25	0.160	1.30	0.23	24.5
INCD0503F-220KT	22	100 / 0.25	0.192	1.29	0.21	27.5
INCD0503F-270KT	27	100 / 0.25	0.242	1.10	0.21	29.5
INCD0503F-330KT	33	100 / 0.25	0.325	0.95	0.18	32.5
INCD0503F-390KT	39	100 / 0.25	0.369	0.92	0.18	35.5
INCD0503F-470KT	47	100 / 0.25	0.436	0.82	0.17	38.5
INCD0503F-560KT	56	100 / 0.25	0.553	0.80	0.17	43.5
INCD0503F-680KT	68	100 / 0.25	0.628	0.76	0.17	48.5
INCD0503F-820KT	82	100 / 0.25	0.785	0.67	0.16	52.5
INCD0503F-101KT	100	100 / 0.25	0.848	0.62	0.15	56.5
INCD0503F-121KT	120	100 / 0.25	1.030	0.60	0.15	64.5
INCD0503F-151KT	150	100 / 0.25	1.440	0.48	0.13	71.5
INCD0503F-181KT	180	100 / 0.25	1.640	0.43	0.13	78.5
INCD0503F-221KT	220	100 / 0.25	2.080	0.37	0.12	86.5
INCD0503F-271KT	270	100 / 0.25	2.460	0.33	0.12	95.5
INCD0503F-331KT	330	100 / 0.25	3.710	0.30	0.10	102.5
INCD0503F-391KT	390	100 / 0.25	4.240	0.26	0.10	114.5

※公差Tolerance: N:±30%、M:±20%、K:±10%.

※工作温度Operating temperature rang: -40 ℃ to +125℃ (Including Self-heating)

※储存温度Storage temperature rang: -40 ℃ to +125℃

Isat电流: 指使电感量比初始值下降10% (The rated DC current is that which cause at 30% inductance reduction from the initial value) 。

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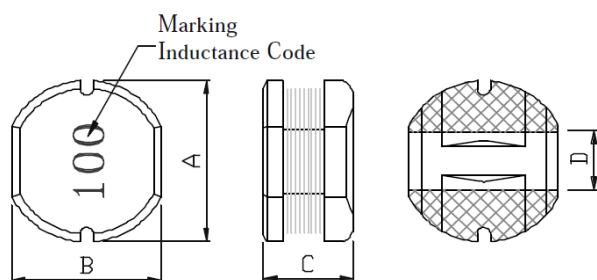


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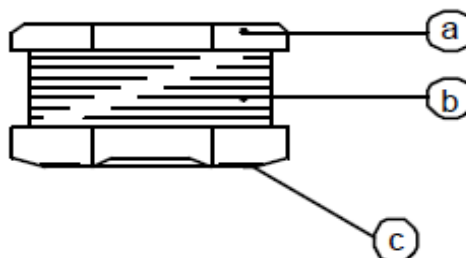
INCD 0504 F 100 M T
(1) (2) (3) (4) (5) (6)

- (1) Series Type
- (2) Dimension: A X C
- (3) Material:ferrite
- (4) Inductance: 2R2=2.2 μ H; 100=10 μ H; 101=100 μ H
- (5) Inductance Tolerance: K= $\pm$ 10%, M= $\pm$ 20%
- (6) Packaging: packed in embossed carrier tape

Series	A (mm)	B (mm)	C (mm)	D (mm)
INCD0504	5.8 $\pm$ 0.3	5.2 $\pm$ 0.3	4.5 $\pm$ 0.3	1.5 Typ.

◆ Material

Item	Material
a. Core	Ferrite DR Core
b. Wire	Enamelled Copper wire
c.Terminal	Ag+Sn+SnPb



◆ Specification

Part Number 料号	Inductance(μH) 电感量	Test Freq 测试频率	DCR(Ω) Typ. 直流电阻	IDC (A) max. 额定电流
INCD0504 Series				
INCD0504F1R0MT	1.00±20%	100KHz/0.25V	0.015	6.10
INCD0504F1R2MT	1.20±20%	100KHz/0.25V	0.020	5.70
INCD0504F1R5MT	1.50±20%	100KHz/0.25V	0.025	5.10
INCD0504F1R8MT	1.80±20%	100KHz/0.25V	0.030	4.90
INCD0504F2R2MT	2.20±20%	100KHz/0.25V	0.035	4.80
INCD0504F3R3MT	3.30±20%	100KHz/0.25V	0.045	4.20
INCD0504F4R7MT	4.70±20%	100KHz/0.25V	0.060	3.30
INCD0504F5R6MT	5.60±20%	100KHz/0.25V	0.070	3.10
INCD0504F6R8MT	6.80±20%	100KHz/0.25V	0.080	3.00
INCD0504F8R2MT	8.20±20%	100KHz/0.25V	0.090	2.70
INCD0504F100KT	10.0±10%	100KHz/0.25V	0.100	2.50
INCD0504F120KT	12.0±10%	100KHz/0.25V	0.120	2.30
INCD0504F150KT	15.0±10%	100KHz/0.25V	0.140	2.20
INCD0504F180KT	18.0±10%	100KHz/0.25V	0.150	1.83
INCD0504F220KT	22.0±10%	100KHz/0.25V	0.180	1.40
INCD0504F270KT	27.0±10%	100KHz/0.25V	0.200	1.37
INCD0504F330KT	33.0±10%	100KHz/0.25V	0.230	1.28
INCD0504F390KT	39.0±10%	100KHz/0.25V	0.320	0.80
INCD0504F470KT	47.0±10%	100KHz/0.25V	0.370	0.72
INCD0504F560KT	56.0±10%	100KHz/0.25V	0.420	0.68
INCD0504F680KT	68.0±10%	100KHz/0.25V	0.460	0.61
INCD0504F820KT	82.0±10%	100KHz/0.25V	0.600	0.58
INCD0504F101KT	100.0±10%	100KHz/0.25V	0.700	0.52
INCD0504F121KT	120.0±10%	100KHz/0.25V	0.930	0.48
INCD0504F151KT	150.0±10%	100KHz/0.25V	1.100	0.40
INCD0504F181KT	180.0±10%	100KHz/0.25V	1.380	0.38
INCD0504F221KT	220.0±10%	100KHz/0.25V	1.570	0.35
INCD0504F271KT	270.0±10%	100KHz/0.25V	1.650	0.32
INCD0504F331KT	330.0±10%	100KHz/0.25V	1.700	0.28
INCD0504F391KT	390.0±10%	100KHz/0.25V	1.800	0.26
INCD0504F471KT	470.0±10%	100KHz/0.25V	2.300	0.23
INCD0504F561KT	560.0±10%	100KHz/0.25V	2.500	0.20
INCD0504F681KT	680.0±10%	100KHz/0.25V	3.000	0.19
INCD0504F821KT	820.0±10%	100KHz/0.25V	4.500	0.16
INCD0504F102KT	1000.0±10%	100KHz/0.25V	4.800	0.14