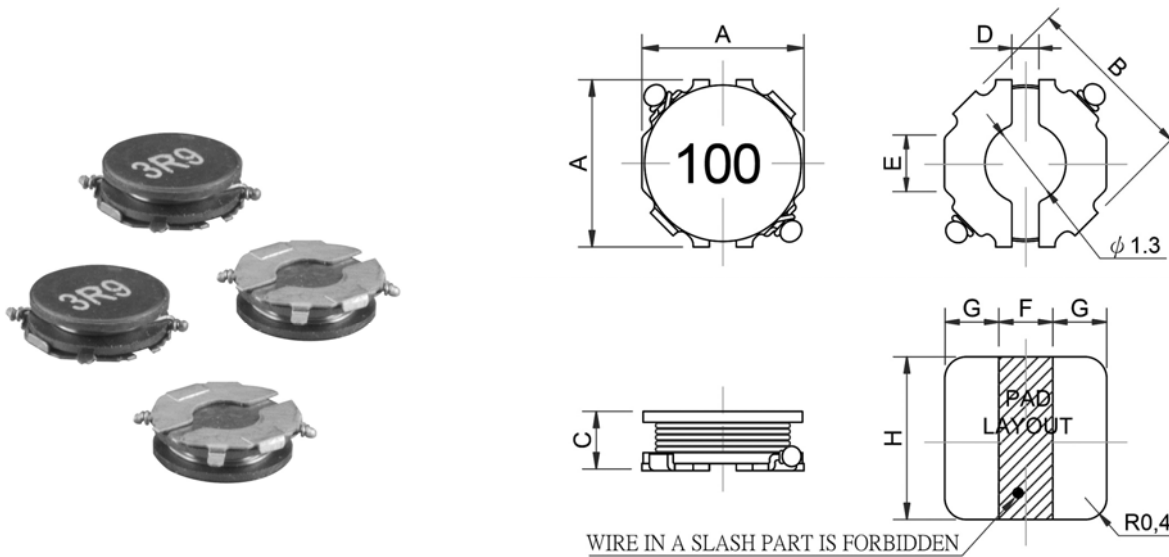


Shape and size: (Dimensions are in mm)



ITEM	A	B	C (max)	D	E	F	G	H
BDR2D10	3.0±0.2	3.2	1.0	0.5	1.0	1.0	1.0	3.0
BDR2D12	3.0±0.2	3.2	1.2	0.5	1.0	1.0	1.0	3.0
BDR2D15	3.0±0.2	3.2	1.5	0.5	1.0	1.0	1.0	3.0

Features:

Automatic process.
New designed terminal for low cost.
Low profile and high current.
Magnetically unshielded construction.
Ideal for digital equipment and hand phone of new generation.
RoHS compliant.

Ordering information:

BDR2D10 - 100 M
(1) (2) (3)
(1) Type: Surface mountable type.
Style: Copper Base with DR core.
2D is 3.0mm square and 10 is about 1.0mm height.
(2) Inductance: 100 for 10.0 uH.
(3) Inductance tolerance: M: ± 20%.

Inductance and rated current ranges:

BDR2D10	1.0~15uH	1.90~0.50A
BDR2D12	1.2~27uH	2.40~0.46A
BDR2D15	1.2~39uH	2.60~0.48A

Characteristics:

Saturation Rated Current (Isat): The current when the inductance becomes 30% lower than its initial value. (Ta=20)
Temperature Rise Current (Irms): The current when temperature of coil increases up to Max. T=40 . (Ta=20)
Operating temperature : -40 to 105 .

Test equipments:

L tested by Agilent 4284A Precision LCR meter.
DCR tested by Milli-ohm meter.
Electrical specifications at 25 .

Applications:

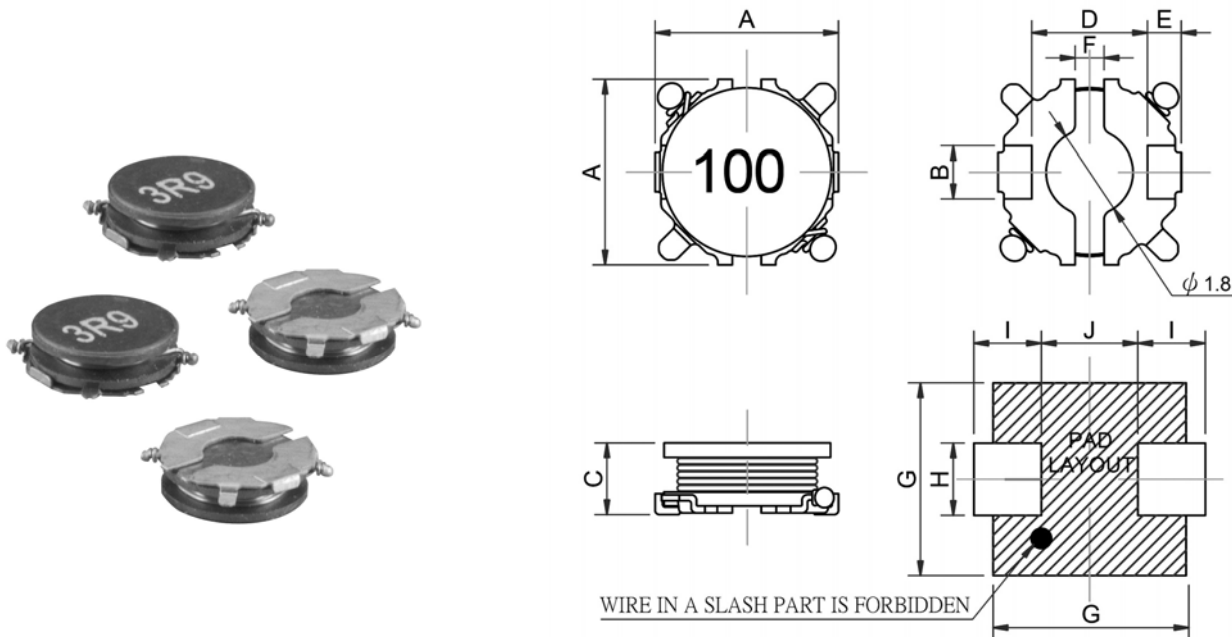
Hand phone of new generation.
DSC, DVC, PDA, MP3, Hard disk drives products.
DC to DC converters, etc.

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated Current (A) Max.		Temperature Rise Current (A) Max.
					L/L10%TYP	L/L30%TYP	
BDR2D10-1R0M	1R0	1.0	100 KHz	91 (70)	1.50	1.90	1.45
BDR2D10-1R2M	1R2	1.2	100 KHz	104 (80)	1.30	1.80	1.40
BDR2D10-2R2M	2R2	2.2	100 KHz	187 (150)	1.00	1.30	1.00
BDR2D10-3R3M	3R3	3.3	100 KHz	287 (230)	0.80	1.10	0.82
BDR2D10-3R9M	3R9	3.9	100 KHz	312 (250)	0.70	1.00	0.77
BDR2D10-4R7M	4R7	4.7	100 KHz	400 (320)	0.65	0.90	0.70
BDR2D10-5R6M	5R6	5.6	100 KHz	475 (380)	0.60	0.85	0.64
BDR2D10-6R8M	6R8	6.8	100 KHz	537 (430)	0.55	0.72	0.60
BDR2D10-8R2M	8R2	8.2	100 KHz	662 (530)	0.50	0.68	0.54
BDR2D10-100M	100	10.0	100 KHz	781 (625)	0.46	0.65	0.49
BDR2D10-120M	120	12.0	100 KHz	843 (675)	0.43	0.60	0.45
BDR2D10-150M	150	15.0	100 KHz	1200 (960)	0.38	0.50	0.42

BDR2D12-1R2M	1R2	1.2	100 KHz	78 (63)	2.10	2.40	1.59
BDR2D12-1R5M	1R5	1.5	100 KHz	93 (74)	1.70	2.00	1.47
BDR2D12-2R2M	2R2	2.2	100 KHz	118 (95)	1.60	1.70	1.20
BDR2D12-2R7M	2R7	2.7	100 KHz	156 (125)	1.30	1.50	1.09
BDR2D12-3R3M	3R3	3.3	100 KHz	175 (140)	1.20	1.40	1.03
BDR2D12-3R9M	3R9	3.9	100 KHz	212 (170)	1.10	1.30	0.94
BDR2D12-4R7M	4R7	4.7	100 KHz	275 (220)	1.00	1.20	0.82
BDR2D12-5R6M	5R6	5.6	100 KHz	312 (250)	0.85	1.10	0.77
BDR2D12-6R8M	6R8	6.8	100 KHz	350 (280)	0.80	1.00	0.71
BDR2D12-8R2M	8R2	8.2	100 KHz	556 (445)	0.75	0.92	0.60
BDR2D12-100M	100	10.0	100 KHz	650 (520)	0.70	0.78	0.55
BDR2D12-120M	120	12.0	100 KHz	718 (575)	0.65	0.72	0.52
BDR2D12-150M	150	15.0	100 KHz	781 (625)	0.60	0.65	0.48
BDR2D12-180M	180	18.0	100 KHz	1068 (855)	0.55	0.58	0.41
BDR2D12-220M	220	22.0	100 KHz	1262 (1010)	0.50	0.55	0.38
BDR2D12-270M	270	27.0	100 KHz	1812 (1450)	0.42	0.46	0.33

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated Current (A) Max.		Temperature Rise Current (A) Max.
					L/L10%TYP	L/L30%TYP	
BDR2D15-1R2M	1R2	1.2	100 KHz	88 (70)	2.30	2.60	1.90
BDR2D15-1R5M	1R5	1.5	100 KHz	100 (80)	2.00	2.40	1.80
BDR2D15-2R2M	2R2	2.2	100 KHz	119 (95)	1.70	2.10	1.60
BDR2D15-2R7M	2R7	2.7	100 KHz	144 (115)	1.60	1.90	1.50
BDR2D15-3R3M	3R3	3.3	100 KHz	156 (125)	1.50	1.80	1.40
BDR2D15-3R9M	3R9	3.9	100 KHz	169 (135)	1.30	1.70	1.30
BDR2D15-4R7M	4R7	4.7	100 KHz	225 (180)	1.20	1.50	1.20
BDR2D15-5R6M	5R6	5.6	100 KHz	250 (200)	1.10	1.40	1.05
BDR2D15-6R8M	6R8	6.8	100 KHz	300 (240)	1.00	1.30	1.00
BDR2D15-8R2M	8R2	8.2	100 KHz	325 (260)	0.90	1.10	0.95
BDR2D15-100M	100	10.0	100 KHz	437 (350)	0.85	1.00	0.90
BDR2D15-120M	120	12.0	100 KHz	487 (390)	0.75	0.90	0.70
BDR2D15-150M	150	15.0	100 KHz	700 (560)	0.65	0.80	0.60
BDR2D15-180M	180	18.0	100 KHz	938 (750)	0.60	0.75	0.55
BDR2D15-220M	220	22.0	100 KHz	1050 (840)	0.55	0.70	0.50
BDR2D15-270M	270	27.0	100 KHz	1312 (1050)	0.50	0.58	0.45
BDR2D15-330M	330	33.0	100 KHz	1562 (1250)	0.45	0.52	0.40
BDR2D15-390M	390	39.0	100 KHz	1750 (1400)	0.40	0.48	0.37

Shape and size: (Dimensions are in mm)



ITEM	A	B	C(max)	D	E	F	G	H	I	J
BDR3D12	3.8±0.2	1.1	1.2	2.4	0.7	0.6	4.0	1.5	1.4	2.0
BDR3D15	3.8±0.2	1.1	1.5	2.4	0.7	0.6	4.0	1.5	1.4	2.0
BDR3D18	3.8±0.2	1.1	1.8	2.4	0.7	0.6	4.0	1.5	1.4	2.0

Features:

- Automatic process.
- New designed terminal for low cost.
- Low profile and high current.
- Magnetically unshielded construction.
- Ideal for digital equipment and hand phone of new generation.
- RoHS compliant.

Ordering information:

- BDR3D12 - 4R7 M**
- (1) (2) (3)
- (1) Type: Surface mountable type.
Style: Copper Base with DR core.
3D is 3.8mm square and 12 is about 1.2mm height.
- (2) Inductance: 4R7 for 4.7 uH.
- (3) Inductance tolerance: M: ± 20%.

Inductance and rated current ranges:

BDR3D12	1.0~39uH	2.70~0.40A
BDR3D15	1.0~47uH	3.00~0.50A
BDR3D18	1.0~56uH	3.60~0.50A

Characteristics:

- Saturation Rated Current (Isat): the current when the inductance becomes 30% lower than its initial value. (Ta=20 °C)
- Temperature Rise Current (Irms): The current when temperature of coil increases up to Max. T=40 °C. (Ta=20 °C)
- Operating temperature : -40 °C to 105 °C.

Test equipments :

- L tested by Agilent 4284A Precision LCR meter.
- DCR tested by Milli-ohm meter.
- Electrical specifications at 25 °C.

Applications:

- Hand phone of new generation.
- DSC, DVC, PDA, MP3, Hard disk drives products.
- DC to DC converters, etc.

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated Current (A) Max.		Temperature Rise Current (A) Max.
					L/L10%TYP	L/L30%TYP	
BDR3D12-1R0M	1R0	1.0	100 KHz	64 (53)	2.10	2.70	2.30
BDR3D12-1R2M	1R2	1.2	100 KHz	79 (64)	1.80	2.40	2.10
BDR3D12-2R2M	2R2	2.2	100 KHz	102 (85)	1.50	1.80	1.78
BDR3D12-2R7M	2R7	2.7	100 KHz	132 (110)	1.30	1.60	1.47
BDR3D12-3R3M	3R3	3.3	100 KHz	168 (140)	1.20	1.40	1.30
BDR3D12-3R9M	3R9	3.9	100 KHz	195 (162)	1.00	1.30	1.20
BDR3D12-4R7M	4R7	4.7	100 KHz	240 (200)	0.90	1.20	0.90
BDR3D12-5R6M	5R6	5.6	100 KHz	288 (240)	0.85	1.10	0.84
BDR3D12-6R8M	6R8	6.8	100 KHz	312 (260)	0.80	1.00	0.78
BDR3D12-8R2M	8R2	8.2	100 KHz	420 (350)	0.70	0.85	0.70
BDR3D12-100M	100	10.0	100 KHz	480 (400)	0.65	0.82	0.65
BDR3D12-120M	120	12.0	100 KHz	618 (515)	0.60	0.70	0.57
BDR3D12-150M	150	15.0	100 KHz	732 (610)	0.52	0.65	0.52
BDR3D12-180M	180	18.0	100 KHz	816 (680)	0.48	0.62	0.48
BDR3D12-220M	220	22.0	100 KHz	1032 (860)	0.44	0.54	0.44
BDR3D12-270M	270	27.0	100 KHz	1176 (980)	0.40	0.50	0.40
BDR3D12-330M	330	33.0	100 KHz	1392 (1160)	0.36	0.45	0.38
BDR3D12-390M	390	39.0	100 KHz	1920 (1600)	0.33	0.40	0.32

BDR3D15-1R0M	1R0	1.0	100 KHz	78 (65)	2.50	3.00	2.20
BDR3D15-2R2M	2R2	2.2	100 KHz	108 (90)	1.90	2.30	1.85
BDR3D15-3R3M	3R3	3.3	100 KHz	126 (105)	1.40	2.00	1.70
BDR3D15-3R9M	3R9	3.9	100 KHz	150 (125)	1.20	1.70	1.65
BDR3D15-4R7M	4R7	4.7	100 KHz	168 (140)	1.10	1.60	1.40
BDR3D15-6R8M	6R8	6.8	100 KHz	228 (190)	0.95	1.30	1.30
BDR3D15-8R2M	8R2	8.2	100 KHz	264 (220)	0.90	1.20	1.20
BDR3D15-100M	100	10.0	100 KHz	300 (250)	0.85	1.10	1.10
BDR3D15-120M	120	12.0	100 KHz	378 (315)	0.78	1.00	1.00
BDR3D15-150M	150	15.0	100 KHz	444 (370)	0.68	0.90	0.90
BDR3D15-180M	180	18.0	100 KHz	564 (470)	0.62	0.80	0.79
BDR3D15-220M	220	22.0	100 KHz	636 (530)	0.52	0.72	0.72
BDR3D15-270M	270	27.0	100 KHz	900 (750)	0.48	0.65	0.60
BDR3D15-330M	330	33.0	100 KHz	1188 (990)	0.45	0.58	0.52
BDR3D15-390M	390	39.0	100 KHz	1344 (1120)	0.42	0.55	0.48
BDR3D15-470M	470	47.0	100 KHz	1752 (1460)	0.37	0.50	0.39

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated		Temperature Rise Current (A) Max.
					Current (A) Max.		
					L/L10%TYP	L/L30%TYP	
BDR3D18-1R0M	1R0	1.0	100 KHz	68 (56)	3.20	3.60	2.20
BDR3D18-1R5M	1R5	1.5	100 KHz	90 (75)	2.40	2.80	1.85
BDR3D18-2R2M	2R2	2.2	100 KHz	108 (90)	2.00	2.30	1.66
BDR3D18-2R7M	2R7	2.7	100 KHz	118 (98)	1.70	2.10	1.59
BDR3D18-3R3M	3R3	3.3	100 KHz	130 (108)	1.60	2.00	1.50
BDR3D18-3R9M	3R9	3.9	100 KHz	140 (116)	1.50	1.90	1.45
BDR3D18-4R7M	4R7	4.7	100 KHz	162 (135)	1.30	1.70	1.37
BDR3D18-5R6M	5R6	5.6	100 KHz	178 (148)	1.20	1.60	1.27
BDR3D18-6R8M	6R8	6.8	100 KHz	198 (165)	1.10	1.50	1.20
BDR3D18-8R2M	8R2	8.2	100 KHz	222 (185)	1.00	1.30	1.13
BDR3D18-100M	100	10.0	100 KHz	252 (210)	0.90	1.20	1.06
BDR3D18-120M	120	12.0	100 KHz	294 (245)	0.85	1.10	0.98
BDR3D18-150M	150	15.0	100 KHz	384 (320)	0.75	1.00	0.86
BDR3D18-180M	180	18.0	100 KHz	432 (360)	0.70	0.92	0.80
BDR3D18-220M	220	22.0	100 KHz	564 (470)	0.60	0.82	0.70
BDR3D18-270M	270	27.0	100 KHz	630 (525)	0.55	0.75	0.67
BDR3D18-330M	330	33.0	100 KHz	804 (670)	0.50	0.65	0.55
BDR3D18-390M	390	39.0	100 KHz	906 (755)	0.47	0.62	0.51
BDR3D18-470M	470	47.0	100 KHz	1260 (1050)	0.43	0.56	0.43
BDR3D18-560M	560	56.0	100 KHz	1620 (1350)	0.38	0.50	0.38

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated Current (A) Max.		Temperature Rise Current (A) Max.
					L/L10%TYP	L/L30%TYP	
BDR4D12-1R0M	1R0	1.0	100 KHz	66 (55)	2.50	3.00	2.50
BDR4D12-1R8M	1R8	1.8	100 KHz	90 (75)	1.80	2.20	2.10
BDR4D12-2R2M	2R2	2.2	100 KHz	108 (90)	1.50	2.00	1.94
BDR4D12-3R3M	3R3	3.3	100 KHz	138 (115)	1.20	1.60	1.72
BDR4D12-4R7M	4R7	4.7	100 KHz	192 (160)	1.00	1.40	1.45
BDR4D12-5R6M	5R6	5.6	100 KHz	210 (175)	0.95	1.30	1.39
BDR4D12-6R8M	6R8	6.8	100 KHz	240 (200)	0.85	1.20	1.30
BDR4D12-8R2M	8R2	8.2	100 KHz	288 (240)	0.80	1.00	1.19
BDR4D12-100M	100	10.0	100 KHz	384 (320)	0.71	0.92	1.00
BDR4D12-120M	120	12.0	100 KHz	432 (360)	0.65	0.85	0.97
BDR4D12-150M	150	15.0	100 KHz	492 (410)	0.60	0.78	0.90
BDR4D12-180M	180	18.0	100 KHz	720 (600)	0.55	0.70	0.75
BDR4D12-220M	220	22.0	100 KHz	768 (640)	0.45	0.65	0.59
BDR4D12-270M	270	27.0	100 KHz	1056 (880)	0.43	0.60	0.47
BDR4D12-330M	330	33.0	100 KHz	1224 (1020)	0.40	0.56	0.44
BDR4D12-390M	390	39.0	100 KHz	1476 (1230)	0.35	0.50	0.40
BDR4D12-470M	470	47.0	100 KHz	1700 (1420)	0.32	0.42	0.37

Part No.	Stamp	Inductance L (uH)	Test Freq (0.1V)	DCR mOHM Max. (Typ.)	Saturation Rated Current (A) Max.		Temperature Rise Current (A) Max.
					L/L10%TYP	L/L30%TYP	
BDR4D15-1R2M	1R2	1.2	100 KHz	78 (65)	3.40	4.00	2.35
BDR4D15-1R5M	1R5	1.5	100 KHz	96 (80)	3.00	3.50	2.00
BDR4D15-2R2M	2R2	2.2	100 KHz	108 (90)	2.60	3.00	1.95
BDR4D15-2R7M	2R7	2.7	100 KHz	120 (100)	2.50	2.70	1.80
BDR4D15-3R3M	3R3	3.3	100 KHz	138 (115)	2.10	2.50	1.70
BDR4D15-3R9M	3R9	3.9	100 KHz	156 (130)	1.90	2.20	1.60
BDR4D15-4R7M	4R7	4.7	100 KHz	174 (145)	1.80	2.10	1.50
BDR4D15-5R6M	5R6	5.6	100 KHz	204 (170)	1.60	1.80	1.35
BDR4D15-6R8M	6R8	6.8	100 KHz	222 (185)	1.40	1.70	1.30
BDR4D15-8R2M	8R2	8.2	100 KHz	264 (220)	1.30	1.60	1.20
BDR4D15-100M	100	10.0	100 KHz	306 (255)	1.20	1.50	1.00
BDR4D15-120M	120	12.0	100 KHz	396 (330)	1.10	1.30	0.95
BDR4D15-150M	150	15.0	100 KHz	450 (375)	1.00	1.20	0.90
BDR4D15-180M	180	18.0	100 KHz	564 (470)	0.92	1.10	0.80
BDR4D15-220M	220	22.0	100 KHz	660 (550)	0.85	1.00	0.70
BDR4D15-270M	270	27.0	100 KHz	912 (760)	0.75	0.85	0.55
BDR4D15-330M	330	33.0	100 KHz	1182 (985)	0.65	0.80	0.45
BDR4D15-390M	390	39.0	100 KHz	1380 (1150)	0.60	0.70	0.40
BDR4D15-470M	470	47.0	100 KHz	1730 (1440)	0.55	0.64	0.35