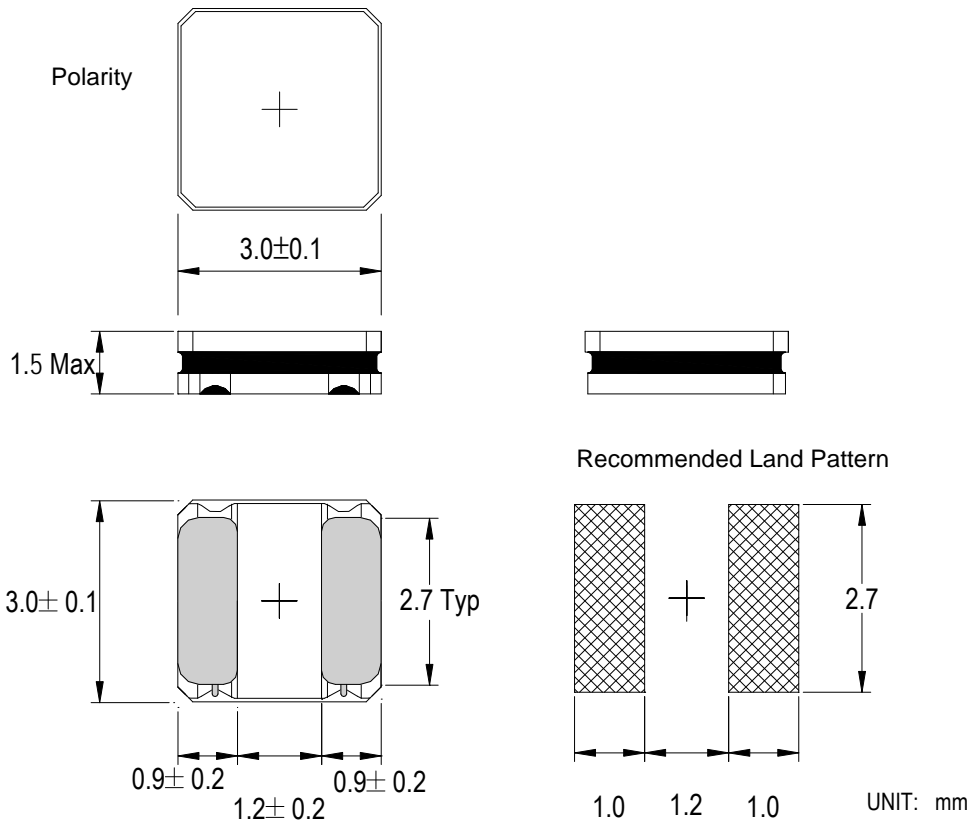


Product Specification		PART NO.	BCNRL3015-SERIES
Product Description	SMD Power Inductor	Page	1
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1. Configuration & Dimension:



2. Construction & Material:

- 1、Core : Ferrite core
- 2、Wire : H Class Enameled copper wire
- 3、Terminal : Ni / Cu / Ag alloy with Sn
- 4、Coating : Magnetic epoxy resin
- 5、Products comply with RoHS' requirements

3. Feature:

- 1、Low profile construction and miniature size
- 2、Magnetic shielded construction .
- 3、High current saturation.
- 4、For new generation portable product D/D converter unit.

4. Product Identification:

BCNRL 3015 - 100 - ML

- (1) (2) (3) (4) (5)

- 1、Type
- 2、Dimension
- 3、Inductance:
- 4、Tolerance: M=20%,N=30%
- 5、RoHS Compliant

5. Application:

DVC、DSC、PDA、LCD display、
 Cellular phones, HDD, etc.

Specification / Electrical								PART NO.	BCNRL3015-SERIES
Product Description	SMD Power Inductor							Page	2
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PART NUMBER	L (μ H)	RDC (Ω)		Isat (A)		Irms (A)		SRF (MHz) MIN	TOLERANCE
		Typ.	Max	Typ.	Max	Typ.	Max		
BCNRL3015-1R0N-NL	1.0	0.040	0.048	2.35	2.10	2.35	2.10	145	30%
BCNRL3015-1R5N-NL	1.5	0.055	0.066	2.00	1.80	2.10	1.90	130	
BCNRL3015-2R2M-NL	2.2	0.060	0.072	1.65	1.48	1.80	1.60	90	20%
BCNRL3015-3R3M-NL	3.3	0.093	0.112	1.40	1.21	1.60	1.45	75	
BCNRL3015-4R7M-NL	4.7	0.113	0.136	1.20	1.08	1.40	1.25	65	
BCNRL3015-6R8M-NL	6.8	0.176	0.211	1.05	0.90	1.10	0.90	50	
BCNRL3015-100M-NL	10	0.234	0.276	0.88	0.75	1.00	0.87	45	
BCNRL3015-150M-NL	15	0.352	0.422	0.68	0.58	0.80	0.65	33	
BCNRL3015-220M-NL	22	0.510	0.622	0.58	0.47	0.60	0.55	28	
BCNRL3015-330M-NL	33	0.799	0.959	0.46	0.39	0.50	0.45	22	
BCNRL3015-470M-NL	47	1.172	1.406	0.38	0.32	0.40	0.40	18	
BCNRL3015-101M-NL	100	2.433	2.920	0.27	0.23	0.29	0.25	11	

1. Test Frequency : 1MHz

2. Test equipment :

L/Q : HP-4286A

SRF : HP-4291B , HP4287A

RDC: HP-4286A , CH16502

3. Isat : Based on Inductance decrease 30%

4. Irms : Based on Temperature increase 40°C

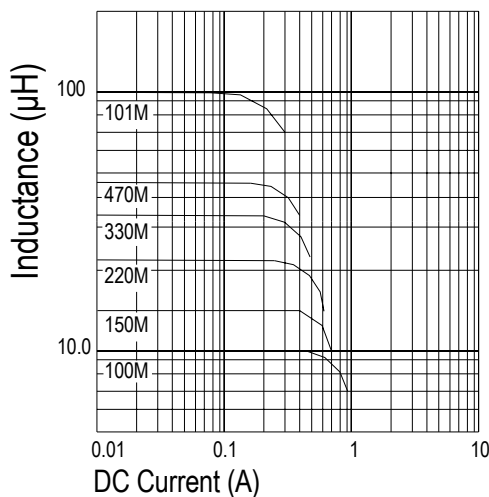
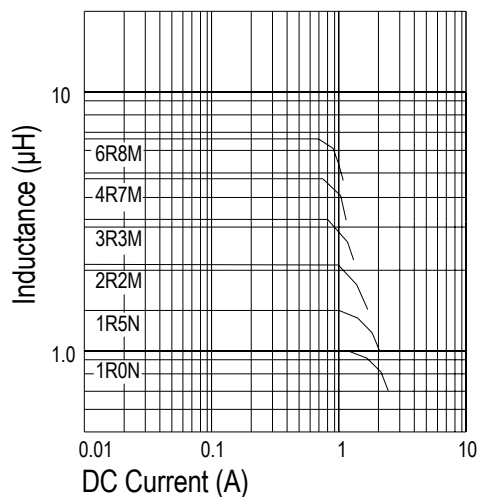
5. Operating temperature range: -40 to +105°C (Including self-temperature rise)

6. Storage Temp.: -40°C TO +85°C

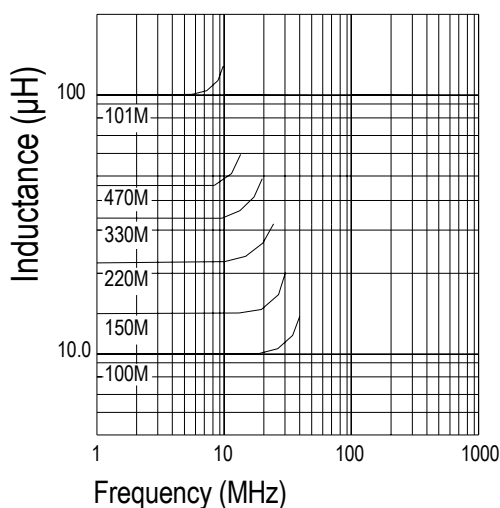
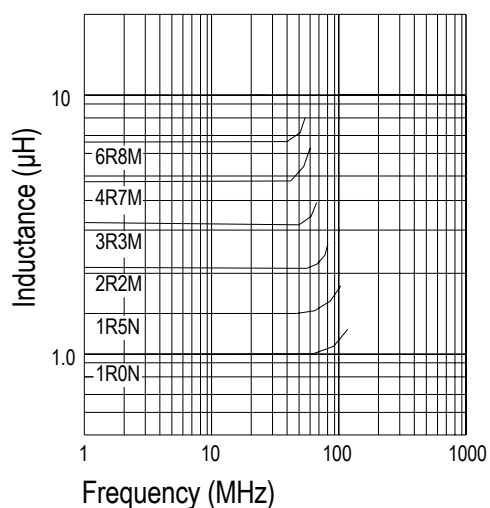
TYPICAL ELECTRICAL CHARACTERISTICS		PART NO.	BCNRL3015-SERIES
Product Description	SMD Power Inductor	Page	3
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TYPICAL ELECTRICAL CHARACTERISTICS

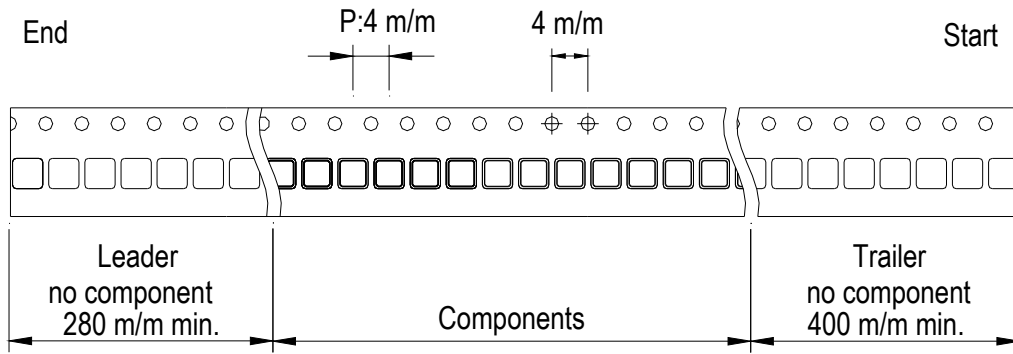
L vs Current



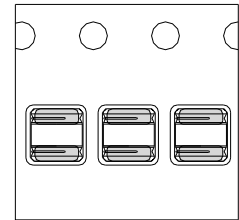
L vs Frequency



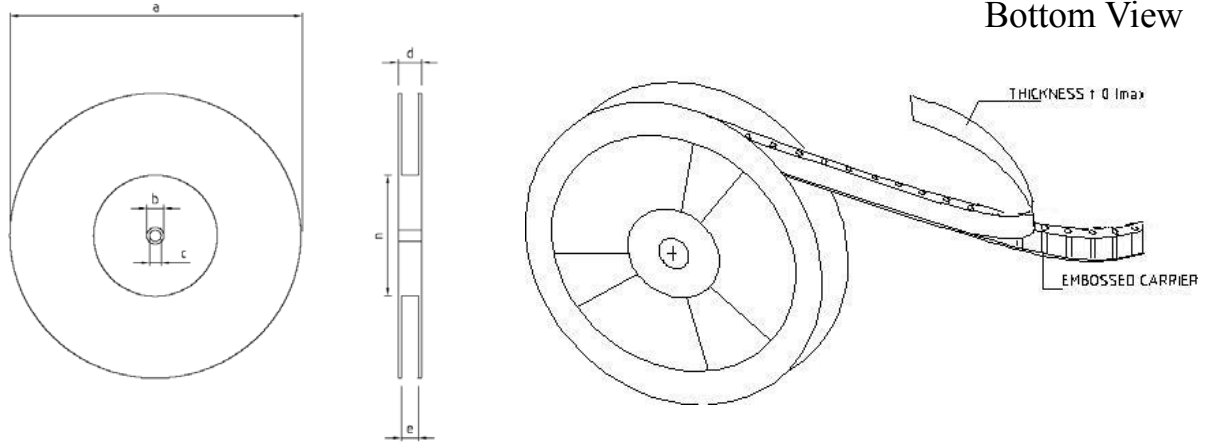
Packaging		PART NO.	BCNRL3015-SERIES
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User direction of feed →



Bottom View



STRENGTH OF COVER TAPE: (20g~60g)

Product Series	t	PI	P	P ₀	W	A ₀	B ₀	K ₀	a	b	c	d	e	n
BCNRL3015	0.25 ±0.05	2.0 ±0.05	4.0 ±0.1	4.0 ±0.1	8.0 ±0.2	3.15 ±0.1	3.15 ±0.1	1.35 ±0.1	178.0 ±2.0	21.0 ±0.8	13.0 ±0.8	12.5 MAX	8.4 ±1.0	50 MIN

Reel		5Reel / Box		6Box / Carton	
Q'ty(Pcs)	Size m/m	Q'ty(Pcs)	Size m/m	Q'ty(Pcs)	Size m/m
2,000	180 φ	10,000	182×182×80	60,000	540×210×205

Reliability		PART NO.	BCNRL3015-SERIES
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1. Reliability test :

NO	Test item	Specification	Test condition
1-1	Solderability	More than 90% of the Terminal electrode Shall be covered With fresh solder.	Preheat : 150±25°C for 60 seconds Solder : Sn96.5 / Ag3 / Cu0.5 or equivalent Solder Temp. : 235±5°C Flux : Rosin Dip time : 4±1 seconds
1-2	High temp. storage test	Electrical characteristics variation shall not change more 3%	Test conditions : +125°C±2°C For 48±2Hours
1-3	Low temp. storage test		Test conditions : -40°C±2°C For 48±2Hours
1-4	Temp. cycle test		Test conditions : +125°C±5°C (30min.) ~+25°C±5°C (2Hours) -40°C±5°C (30min.) Total test : 10 cycle
1-5	Humidity test		Temperature : +40°C±2°C Humidity : 90%±5% Time : 96 hours
1-6	Thermal shock test		Test conditions: +125°C±5°C (30min.)~-65°C±5°C (30min.) Temp change: 2 min. Total : 50 cycles
1-7	Life test		Test conditions : +70°C±5°C Total test : 300 hours

2. Recommended Lead-Free IR Reflow Conditions :

