

SUNLEI TECHNOLOGY CORP.

LOW PROFILE TYPE SMD Inductors- SNR Series

SNR series For High Q & F and Low DC Resistance

Features

- Small and low profile inductor
- It corresponds to high current
- Simple and original magnetic shield structure
- Structure strong against a shock-proof



Applications

Small DC/DC converter (cellular phone,HDD.
DVC,DSC,PDA, LCD Display Etc)

Product Identification

SNR 4012 – 1R0 M -PF

SNR: SERIES NAME

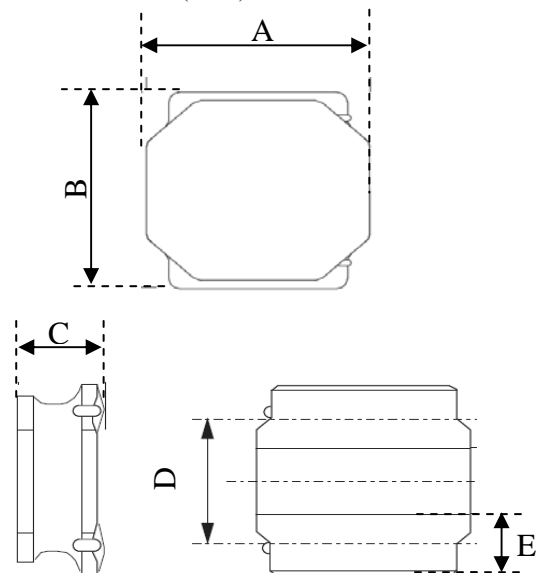
4012:Dimensions CODE

1R0: INDUCTANCE CODE.

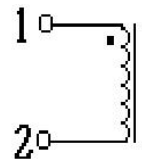
M: TOLERANCE, K=10% M=20%.

PF:Pb-Free

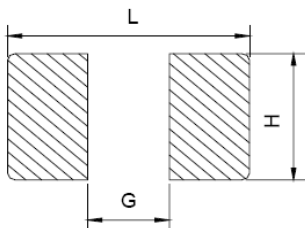
Dimensions (mm)



SCHEMATIC



RECOMMENDER P.C.B LAYOUT



SERIES	L	H	G
SNR30XX	3.2	3.2	1.2
SNR40XX	4.2	4.2	1.8
SNR60XX	6.2	6.2	2.8

SERIES	A	B	C	D	E
SNR3010	3.0±0.2	3.0±0.2	1.0Max	1.9±0.2	0.9±0.2
SNR3012	3.0±0.2	3.0±0.2	1.2Max	1.9±0.2	0.9±0.2
SNR3015	3.0±0.2	3.0±0.2	1.5Max	1.9±0.2	0.9±0.2
SNR4010	4.0±0.3	4.0±0.3	1.0Max	2.5±0.2	1.1±0.2
SNR4012	4.0±0.3	4.0±0.3	1.2Max	2.5±0.2	1.1±0.2
SNR4018	4.0±0.3	4.0±0.3	1.8Max	2.5±0.2	1.1±0.2
SNR4026	4.0±0.3	4.0±0.3	2.6Max	2.5±0.2	1.1±0.2
SNR6012	6.0±0.3	6.0±0.3	1.2Max	4.7±0.2	1.6±0.2
SNR6020	6.0±0.3	6.0±0.3	2.0Max	4.7±0.2	1.6±0.2
SNR6028	6.0±0.3	6.0±0.3	2.8Max	4.7±0.2	1.6±0.2
SNR6045	6.0±0.3	6.0±0.3	4.5Max	4.7±0.2	1.6±0.2

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Electrical Characteristics

Part Number	Inductance (μ H)	Test Frequency (HZ)	DC Resistance ($\Omega \pm 20\%$)	I rms (A) typ.	I sat (A) typ.
SNR3010-1R0□-PF	1.0	100KHz	0.065	1.40	1.30
SNR3010-1R5□-PF	1.5	100KHz	0.08	1.30	1.20
SNR3010-2R2□-PF	2.2	100KHz	0.10	1.10	1.10
SNR3010-3R3□-PF	3.3	100KHz	0.14	0.94	0.87
SNR3010-4R7□-PF	4.7	100KHz	0.19	0.78	0.75
SNR3010-6R8□-PF	6.8	100KHz	0.30	0.63	0.61
SNR3010-100□-PF	10	100KHz	0.45	0.51	0.50
SNR3010-150□-PF	15	100KHz	0.74	0.40	0.40
SNR3010-220□-PF	22	100KHz	1.03	0.35	0.35
SNR3010-330□-PF	33	100KHz	1.55	0.27	0.26
SNR3010-470□-PF	47	100KHz	2.05	0.23	0.22
SNR3012-1R0□-PF	1.0	100KHz	0.05	1.49	1.50
SNR3012-1R5□-PF	1.5	100KHz	0.06	1.40	1.36
SNR3012-2R2□-PF	2.2	100KHz	0.08	1.20	1.10
SNR3012-3R3□-PF	3.3	100KHz	0.10	1.05	0.91
SNR3012-4R7□-PF	4.7	100KHz	0.13	0.98	0.77
SNR3012-6R8□-PF	6.8	100KHz	0.19	0.74	0.67
SNR3012-100□-PF	10	100KHz	0.29	0.63	0.54
SNR3012-150□-PF	15	100KHz	0.45	0.48	0.44
SNR3012-220□-PF	22	100KHz	0.63	0.42	0.37
SNR3012-330□-PF	33	100KHz	1.03	0.33	0.31
SNR3012-470□-PF	47	100KHz	1.45	0.28	0.25
SNR3015-1R0□-PF	1.0	100KHz	0.03	2.10	2.10
SNR3015-1R5□-PF	1.5	100KHz	0.04	1.82	1.80
SNR3015-2R2□-PF	2.2	100KHz	0.06	1.50	1.48
SNR3015-3R3□-PF	3.3	100KHz	0.08	1.23	1.21
SNR3015-4R7□-PF	4.7	100KHz	0.12	1.04	1.02
SNR3015-6R8□-PF	6.8	100KHz	0.16	0.88	0.87
SNR3015-100□-PF	10	100KHz	0.23	0.71	0.70
SNR3015-150□-PF	15	100KHz	0.36	0.56	0.56
SNR3015-220□-PF	22	100KHz	0.52	0.47	0.47
SNR3015-330□-PF	33	100KHz	0.84	0.37	0.39
SNR3015-470□-PF	47	100KHz	1.34	0.30	0.32

Note:

- (1). All test data is referenced to 25°C ambient.
- (2). Operating Temperature Range-55°C to +105°C.
- (3). DC current(A)that will cause an approximate Δ T of 40°C.
- (4). DC current(A)that will cause Lo to drop approximately 30%.
- (5). □Tolerance of inductance \pm 10%(K) \pm 20%(M) \pm 30%(N)

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Part Number	Inductance (μ H)	Test Frequency (HZ)	DC Resistance ($\Omega \pm 20\%$)	I rms (A) typ.	I sat (A) typ.
SNR4010-1R0□-PF	1.0	100KHz	0.10	1.05	1.80
SNR4010-2R2□-PF	2.2	100KHz	0.15	0.89	1.15
SNR4010-3R3□-PF	3.3	100KHz	0.18	0.82	1.10
SNR4010-4R7□-PF	4.7	100KHz	0.21	0.75	0.90
SNR4010-6R8□-PF	6.8	100KHz	0.30	0.62	0.74
SNR4010-100□-PF	10	100KHz	0.38	0.60	0.56
SNR4010-150□-PF	15	100KHz	0.51	0.51	0.47
SNR4010-220□-PF	22	100KHz	0.87	0.40	0.36
SNR4010-330□-PF	33	100KHz	1.54	0.30	0.28
SNR4010-470□-PF	47	100KHz	1.81	0.28	0.24
SNR4012-1R0□-PF	1.0	100KHz	0.06	1.50	2.50
SNR4012-2R2□-PF	2.2	100KHz	0.09	1.20	1.65
SNR4012-3R3□-PF	3.3	100KHz	0.13	0.98	1.20
SNR4012-4R7□-PF	4.7	100KHz	0.14	0.96	1.05
SNR4012-6R8□-PF	6.8	100KHz	0.18	0.84	0.90
SNR4012-100□-PF	10	100KHz	0.24	0.77	0.74
SNR4012-150□-PF	15	100KHz	0.40	0.60	0.56
SNR4012-220□-PF	22	100KHz	0.48	0.54	0.51
SNR4012-330□-PF	33	100KHz	0.81	0.42	0.40
SNR4012-470□-PF	47	100KHz	1.00	0.37	0.35
SNR4018-1R0□-PF	1.0	100KHz	0.03	1.83	4.00
SNR4018-2R2□-PF	2.2	100KHz	0.06	1.44	2.70
SNR4018-3R3□-PF	3.3	100KHz	0.07	1.23	2.00
SNR4018-4R7□-PF	4.7	100KHz	0.09	1.20	1.70
SNR4018-6R8□-PF	6.8	100KHz	0.11	1.06	1.45
SNR4018-100□-PF	10	100KHz	0.18	0.84	1.20
SNR4018-150□-PF	15	100KHz	0.25	0.65	0.94
SNR4018-220□-PF	22	100KHz	0.36	0.59	0.80
SNR4018-330□-PF	33	100KHz	0.53	0.49	0.65
SNR4018-470□-PF	47	100KHz	0.65	0.42	0.57
SNR4018-680□-PF	68	100KHz	1.00	0.32	0.47
SNR4018-101□-PF	100	100KHz	1.50	0.27	0.40
SNR4018-151□-PF	150	100KHz	2.50	0.22	0.31
SNR4018-221□-PF	220	100KHz	4.00	0.17	0.27

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Electrical Characteristics

Part Number	Inductance (μ H)	Test Frequency (HZ)	DC Resistance (Ω ±20%)	I rms (A) typ.	I sat (A) typ.
SNR4026-1R2□-PF	1.2	100KHz	0.030	2.30	3.10
SNR4026-2R3□-PF	2.3	100KHz	0.040	1.97	2.10
SNR4026-3R5□-PF	3.5	100KHz	0.050	1.70	1.80
SNR4026-4R7□-PF	4.7	100KHz	0.055	1.60	1.45
SNR4026-6R6□-PF	6.6	100KHz	0.065	1.50	1.30
SNR4026-100□-PF	10	100KHz	0.085	1.30	1.00
SNR4026-150□-PF	15	100KHz	0.110	1.10	0.90
SNR4026-220□-PF	22	100KHz	0.165	0.90	0.61
SNR4026-330□-PF	33	100KHz	0.200	0.80	0.54
SNR4026-470□-PF	47	100KHz	0.300	0.65	0.41
SNR6012-2R5□-PF	2.5	100KHz	0.09	1.73	2.10
SNR6012-4R0□-PF	4.0	100KHz	0.10	1.57	1.80
SNR6012-5R3□-PF	5.3	100KHz	0.11	1.4	1.50
SNR6012-6R8□-PF	6.8	100KHz	0.17	1.18	1.3
SNR6012-100□-PF	10	100KHz	0.24	1.00	1.00
SNR6012-150□-PF	15	100KHz	0.33	0.79	0.80
SNR6012-220□-PF	22	100KHz	0.53	0.63	0.76
SNR6012-330□-PF	33	100KHz	0.70	0.53	0.59
SNR6012-470□-PF	47	100KHz	1.05	0.46	0.52
SNR6012-680□-PF	68	100KHz	1.35	0.41	0.44
SNR6012-101□-PF	100	100KHz	2.18	0.32	0.35
SNR6020-0R8□-PF	0.8	100KHz	0.020	3.80	5.50
SNR6020-1R5□-PF	1.5	100KHz	0.026	3.20	4.00
SNR6020-2R2□-PF	2.2	100KHz	0.034	2.70	3.20
SNR6020-3R3□-PF	3.3	100KHz	0.040	2.60	2.80
SNR6020-4R7□-PF	4.7	100KHz	0.058	2.00	2.40
SNR6020-6R8□-PF	6.8	100KHz	0.085	1.80	2.00
SNR6020-100□-PF	10	100KHz	0.125	1.40	1.70
SNR6020-220□-PF	22	100KHz	0.290	0.95	1.05

Note:

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- (5). □Tolerance of inductance±10%(K) ±20%(M) ±30%(N)

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Electrical Characteristics

Part Number	Inductance (μ H)	Test Frequency (HZ)	DC Resistance (Ω ±20%)	I rms (A) typ.	I sat (A) typ.
SNR6028-0R9□-PF	0.9	100KHz	0.013	4.60	6.60
SNR6028-1R5□-PF	1.5	100KHz	0.016	4.20	5.00
SNR6028-2R2□-PF	2.2	100KHz	0.020	3.70	4.20
SNR6028-3R0□-PF	3.0	100KHz	0.023	3.40	3.60
SNR6028-4R7□-PF	4.7	100KHz	0.031	3.00	2.70
SNR6028-6R0□-PF	6	100KHz	0.040	2.50	2.50
SNR6028-100□-PF	10	100KHz	0.065	1.90	1.90
SNR6028-150□-PF	15	100KHz	0.095	1.80	1.60
SNR6028-220□-PF	22	100KHz	0.14	1.40	1.30
SNR6028-330□-PF	33	100KHz	0.22	1.10	1.10
SNR6028-470□-PF	47	100KHz	0.30	0.92	0.95
SNR6028-680□-PF	68	100KHz	0.42	0.77	0.76
SNR6028-101□-PF	100	100KHz	0.60	0.66	0.62
SNR6045-1R0□-PF	1.0	100KHz	0.014	4.20	8.50
SNR6045-1R3□-PF	1.3	100KHz	0.016	4.00	8.00
SNR6045-1R8□-PF	1.8	100KHz	0.018	3.70	7.00
SNR6045-2R3□-PF	2.3	100KHz	0.021	3.50	6.00
SNR6045-3R0□-PF	3.0	100KHz	0.024	3.20	5.00
SNR6045-4R5□-PF	4.5	100KHz	0.031	3.00	4.00
SNR6045-6R3□-PF	6.3	100KHz	0.038	2.80	3.80
SNR6045-100□-PF	10	100KHz	0.047	2.50	3.00
SNR6045-150□-PF	15	100KHz	0.077	1.90	2.30
SNR6045-220□-PF	22	100KHz	0.115	1.50	1.90
SNR6045-330□-PF	33	100KHz	0.145	1.40	1.50
SNR6045-470□-PF	47	100KHz	0.22	1.10	1.30
SNR6045-680□-PF	68	100KHz	0.33	0.90	1.00
SNR6045-101□-PF	100	100KHz	0.50	0.70	0.80

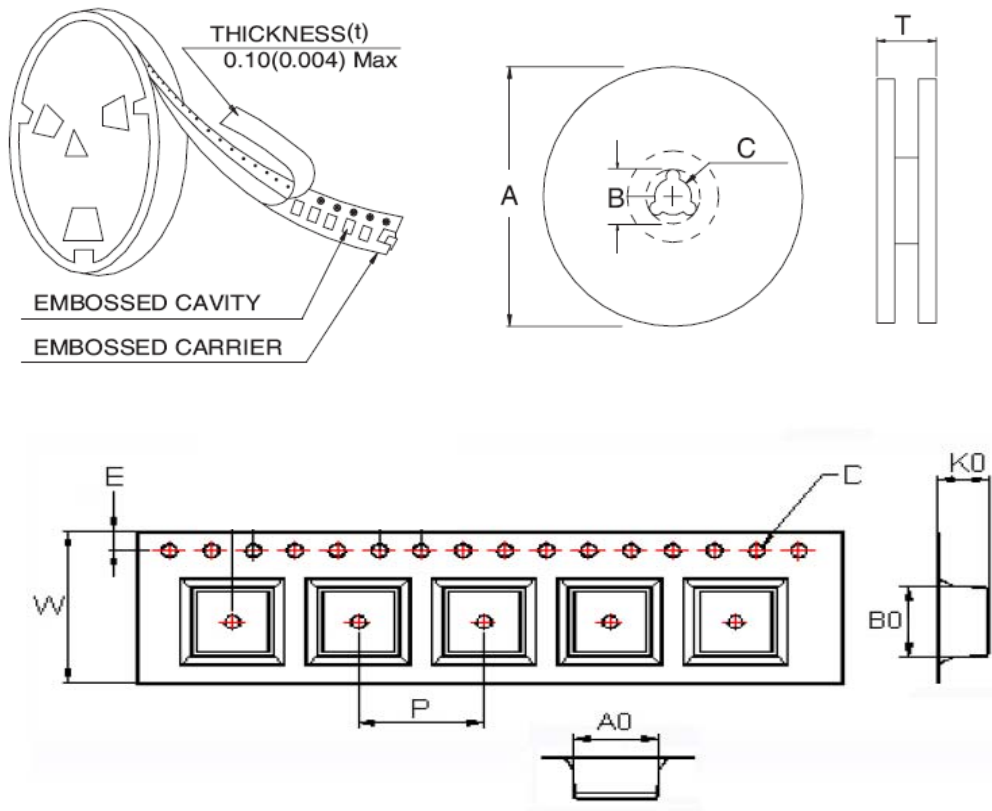
Note:

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- (5). □ Tolerance of inductance ±10%(K) ±20%(M) ±30%(N)

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PACKAGING

1. Configuration.



2. Dimension in mm

TYPE	A	B	C	T
12mm	330	100	21±0.8	16.4
16mm	330	100	21±0.8	20.4
24mm	330	100	21±0.8	28.4
32mm	330	100	21±0.8	36.4

TYPE	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	P(mm)	PCS/REEL
SNR3010	3.2±0.1	3.2±0.1	1.4±0.1	12±0.3	8±0.1	5000
SNR3012	3.2±0.1	3.2±0.1	1.6±0.1	12±0.3	8±0.1	4500
SNR3015	3.2±0.1	3.2±0.1	1.9±0.1	12±0.3	8±0.1	4000
SNR4010	4.3±0.1	4.3±0.2	1.4±0.1	12±0.3	8±0.1	5000
SNR4012	4.3±0.1	4.3±0.2	1.6±0.1	12±0.3	8±0.1	4500
SNR4018	4.3±0.1	4.3±0.2	2.1±0.1	12±0.3	8±0.1	3000
SNR4026	4.3±0.1	4.3±0.2	3.1±0.1	12±0.3	8±0.1	2000
SNR6012	6.3±0.1	6.3±0.2	1.6±0.1	12±0.3	8±0.1	2000
SNR6020	6.3±0.1	6.3±0.2	2.3±0.1	12±0.3	8±0.1	2000
SNR6028	6.3±0.1	6.3±0.2	3.1±0.1	12±0.3	8±0.1	2000
SNR6045	6.3±0.1	6.3±0.2	4.7±0.1	12±0.3	8±0.1	1500