

■ FEATURES

- SMD Power Inductor (SNR Series)
- low profile, low RDC, high current handling capacities
- Magnetically shielded structure that ensures the high-density mounting configurations
- Flat bottom surface ensures secure, reliable mounting
- Provided in embossed carriage tape packaging for use with automatic mounting machines.

■ APPLICATIONS

Ideally used in mobile phones, PDA, DSC, DC-DC converters, etc.

■ PRODUCT IDENTIFICATION

SNR - 201610 - 1R0 I

① ② ③ ④

1. Series name
2. Product dimensions: (201610=2.0*1.6*1.0 mm)
3. Inductance value: (R68= 0.68uH 1R0=1.0uH 100=10uH)
4. Inductance tolerance: (M=20 %; T=30 %)

■ SHAPES & DIMENSIONS

Fig1

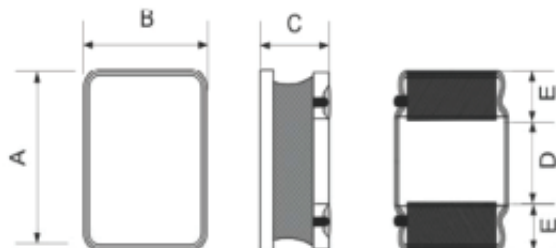
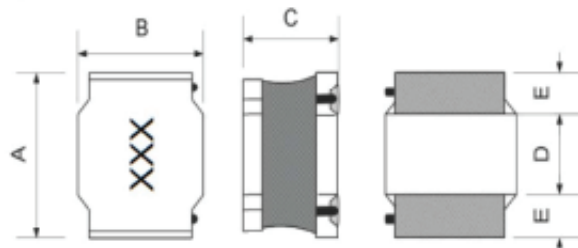
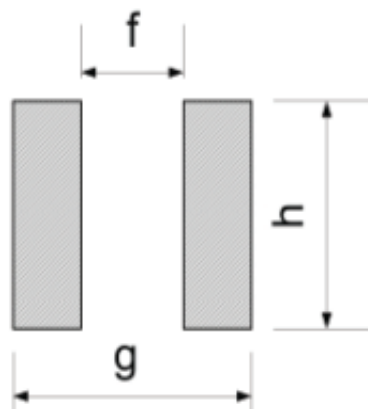


Fig2



Series	Dimensions (mm)					Shape
	A	B	C Max.	D Ref.	E Ref.	
201620	2.0±0.2	1.6±0.2	1.0	0.6	0.60	Fig. 1
252010	2.5±0.2	2.0±0.2	1.0	0.8	0.80	Fig. 1
252012	2.5±0.2	2.0±0.2	1.2	0.8	8.00	Fig. 2
3010	3.0±0.2	3.0±0.2	1.0	1.5	0.75	Fig. 2
3012	3.0±0.2	3.0±0.2	1.2	1.5	0.75	Fig. 2
3015	3.0±0.2	3.0±0.2	1.5	1.5	0.75	Fig. 2
4012	4.0±0.2	4.0±0.2	1.2	2.1	0.95	Fig. 2
4018	4.0±0.2	4.0±0.2	1.8	2.1	0.95	Fig. 2
4030	4.0±0.2	4.0±0.2	3.0	2.1	0.95	Fig. 2
5020	5.0±0.2	5.0±0.2	2.0	2.5	1.25	Fig. 2
5040	5.0±0.2	5.0±0.2	4.0	2.5	1.25	Fig. 2
6028	6.0±0.2	6.0±0.2	2.8	2.9	1.55	Fig. 2
6045	6.0±0.2	6.0±0.2	4.5	2.9	1.55	Fig. 2
8040	8.0±0.2	8.0±0.2	4.2	4.0	2.00	Fig. 2

■ RECOMMENDED FOOTPRINT



Series	Dimensions (mm)		
	f Ref.	g Ref.	h Ref.
2016	0.8	2.2	1.6
2520	0.8	2.5	2.0
30	1.5	3.1	2.7
40	1.9	4.1	3.7
50	2.3	5.1	4.2
60	2.8	6.2	5.7
80	3.8	7.5	7.4

■ ELECTRICAL CHARACTERISTICS

SNR-201610 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) Max.	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-201610-1R0T	1.0	30	0.22	1.26	1.44
SNR-201610-1RST	1.5	30	0.34	0.99	1.26
SNR-201610-2R2T	2.2	30	0.42	0.90	1.08
SNR-201610-3R3M	3.3	20	0.66	0.74	0.81
SNR-201610-4R7M	4.7	20	0.87	0.61	0.72
SNR-201610-5R6M	5.6	20	0.94	0.58	0.72
SNR-201610-6R8M	6.8	20	1.26	0.51	0.63
SNR-201610-100M	10.0	20	1.88	0.42	0.52
SNR-201610-120M	12.0	20	2.15	0.38	0.38
SNR-201610-220M	22.0	20	3.77	0.28	0.36

SNR-252010 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-252010-1R0T	1.0	30	0.108	1.85	1.65
SNR-252010-1R5T	1.5	30	0.182	1.80	1.30
SNR-252010-2R2T	2.2	30	0.209	1.20	1.20
SNR-252010-3R3M	3.3	20	0.328	1.05	0.90
SNR-252010-4R7M	4.7	20	0.563	0.95	0.73
SNR-252010-5R6M	5.6	20	0.622	0.80	0.70
SNR-252010-6R8M	6.8	20	0.896	0.78	0.59
SNR-252010-100M	10.0	20	0.910	0.65	0.50
SNR-252010-150M	15.0	20	1.450	0.47	0.43
SNR-252010-220M	22.0	20	1.839	0.45	0.41

■ ELECTRICAL CHARACTERISTICS

SNR-252012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-252012-1R0T	1.0	30	0.090	2.59	1.93
SNR-252012-1R5T	1.5	30	0.147	2.24	1.40
SNR-252012-2R2T	2.2	30	0.216	1.85	1.15
SNR-252012-3R3M	3.3	20	0.264	1.61	1.04
SNR-252012-4R7M	4.7	20	0.377	1.12	0.84
SNR-252012-5R6M	5.6	20	0.538	1.11	0.73
SNR-252012-6R8M	6.8	20	0.581	0.98	0.69
SNR-252012-100M	10.0	20	0.690	0.79	0.62
SNR-252012-220M	22.0	20	1.976	0.53	0.38

SNR-3010 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3010-1R0T	1.0	30	0.065	1.40	1.45
SNR-3010-1R5T	1.5	30	0.080	1.27	1.30
SNR-3010-2R2T	2.2	30	0.110	1.15	1.09
SNR-3010-3R3M	3.3	20	0.145	0.97	0.96
SNR-3010-4R7M	4.7	20	0.225	0.75	0.77
SNR-3010-6R8M	5.6	20	0.305	0.55	0.66
SNR-3010-8R2M	6.8	20	0.400	0.55	0.58
SNR-3010-100M	10.0	20	0.400	0.55	0.58
SNR-3010-150M	15.0	20	0.610	0.42	0.47
SNR-3010-220M	22.0	20	0.930	0.35	0.38

SNR-3012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3010-1R0T	1.0	30	0.040	1.87	2.20
SNR-3010-1R5T	1.5	30	0.045	1.62	2.01
SNR-3010-2R2T	2.2	30	0.075	1.20	1.55
SNR-3010-3R3M	3.3	20	0.100	1.05	1.36
SNR-3010-4R7M	4.7	20	0.120	0.90	1.24
SNR-3010-6R8M	5.6	20	0.190	0.75	0.98
SNR-3010-100M	10.0	20	0.265	0.60	0.83
SNR-3010-150M	15.0	20	0.360	0.45	0.71
SNR-3010-220M	22.0	20	0.645	0.42	0.53

■ ELECTRICAL CHARACTERISTICS

SNR-3015 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-3015-1R0T	1.0	30	0.030	2.32	2.35
SNR-3015-1R5T	0.2	30	0.050	2.30	1.70
SNR-3015-2R2T	2.2	30	0.060	1.60	1.60
SNR-3015-3R3M	3.3	20	0.080	1.32	1.36
SNR-3015-4R7M	4.7	20	0.125	1.10	1.09
SNR-3015-5R6M	5.6	20	0.168	0.93	0.92
SNR-3015-6R8M	6.8	20	0.200	0.85	0.85
SNR-3015-100M	10.0	20	0.250	0.72	0.77
SNR-3015-150M	15.0	20	0.350	0.66	0.65
SNR-3015-220M	22.0	20	0.460	0.52	0.57
SNR-3015-330M	33.0	20	0.820	0.44	0.43
SNR-3015-470M	47.0	20	1.250	0.35	0.35
SNR-3015-680M	68.0	20	2.700	0.28	0.23
SNR-3015-101M	100.0	20	3.110	0.23	0.21

SNR-4012 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4012-1R0T	1.0	30	0.050	2.61	1.65
SNR-4012-1R5T	1.5	30	0.065	2.10	1.46
SNR-4012-2R2T	2.2	30	0.080	1.76	1.32
SNR-4012-3R3M	3.3	20	0.110	1.72	1.12
SNR-4012-4R7M	4.7	20	0.125	1.15	1.05
SNR-4012-5R6M	5.6	20	0.140	1.00	1.00
SNR-4012-6R8M	6.8	20	0.198	0.85	0.84
SNR-4012-100M	10.0	20	0.265	0.80	0.77
SNR-4012-150M	15.0	20	0.340	0.56	0.64
SNR-4012-220M	22.0	20	0.597	0.46	0.49
SNR-4012-330M	33.0	20	0.810	0.42	0.42
SNR-4012-470M	47.0	20	1.100	0.35	0.37

■ ELECTRICAL CHARACTERISTICS

SNR-4018 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4018-1R0T	1.0	30	0.025	4.80	2.00
SNR-4018-1R5T	1.5	30	0.030	3.35	1.80
SNR-4018-2R2T	2.2	30	0.045	2.70	1.65
SNR-4018-3R3M	3.3	20	0.070	2.45	1.23
SNR-4018-4R7M	4.7	20	0.090	1.70	1.20
SNR-4018-6R8M	6.8	20	0.110	1.45	1.06
SNR-4018-100M	10.0	20	0.180	0.33	0.84
SNR-4018-150M	15.0	20	0.250	0.94	0.65
SNR-4018-220M	22.0	20	0.360	0.80	0.59
SNR-4018-330M	33.0	20	0.530	0.56	0.49
SNR-4018-470M	47.0	20	0.650	0.57	0.42
SNR-4018-680M	68.0	20	1.000	0.47	0.32
SNR-4018-101M	100.0	20	1.750	0.40	0.25

SNR-4030 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-4030-1R0T	1.0	30	0.014	5.26	4.15
SNR-4030-1R5T	1.5	30	0.020	4.84	3.34
SNR-4030-2R2T	2.2	30	0.030	4.90	2.95
SNR-4030-3R3M	3.3	20	0.040	3.30	2.40
SNR-4030-4R7M	4.7	20	0.060	2.90	2.00
SNR-4030-5R6M	5.6	20	0.065	2.60	1.95
SNR-4030-6R8M	6.8	20	0.090	2.75	1.60
SNR-4030-100M	10.0	20	0.100	1.95	1.50
SNR-4030-120M	12.0	20	0.135	1.70	1.30
SNR-4030-150M	15.0	20	0.190	1.65	1.11
SNR-4030-180M	18.0	20	0.200	1.40	1.10
SNR-4030-220M	22.0	20	0.225	1.30	1.00
SNR-4030-330M	33.0	20	0.330	1.10	0.84
SNR-4030-470M	47.0	20	0.445	0.95	0.72
SNR-4030-560M	56.0	20	0.555	0.85	0.65
SNR-4030-680M	68.0	20	0.868	0.72	0.52
SNR-4030-820M	82.0	20	1.060	0.66	0.47
SNR-4030-101M	100.0	20	1.150	0.60	0.45
SNR-4030-121M	120.0	20	1.350	0.55	0.42
SNR-4030-151M	150.0	20	1.800	0.50	0.35
SNR-4030-221M	175.0	29	2.500	0.40	0.30

■ ELECTRICAL CHARACTERISTICS

SNR-5020 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-5020-R68T	0.68	30	0.017	5.50	4.00
SNR-5020-1R0T	1.0	30	0.020	4.10	3.80
SNR-5020-1R5T	1.5	30	0.026	4.10	3.20
SNR-5020-2R2T	2.2	30	0.032	3.20	2.90
SNR-5020-3R3M	3.3	20	0.043	2.55	2.50
SNR-5020-4R7M	4.7	20	0.057	2.50	2.20
SNR-5020-5R6M	5.6	20	0.064	2.30	2.05
SNR-5020-6R8M	6.8	20	0.083	2.05	1.80
SNR-5020-8R2M	6.8	20	0.098	1.85	1.65
SNR-5020-100M	10.0	20	0.110	1.70	1.55
SNR-5020-120M	12.0	20	0.140	1.50	1.40
SNR-5020-150M	15.0	20	0.165	1.00	1.11
SNR-5020-180M	18.0	20	0.200	1.35	1.25
SNR-5020-220M	22.0	20	0.226	1.15	1.10
SNR-5020-330M	33.0	20	0.390	0.92	0.90
SNR-5020-470M	47.0	20	0.523	0.77	0.77
SNR-5020-560M	56.0	20	0.630	0.77	0.70
SNR-5020-680M	68.0	20	0.740	0.65	0.64
SNR-5020-820M	82.0	20	0.965	0.65	0.50
SNR-5020-101M	100.0	20	1.100	0.53	0.53
SNR-5020-121M	120.0	20	1.350	0.42	0.40

SNR-5040 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-5040-1R0T	1.0	30	0.012	7.35	4.90
SNR-5040-1R5T	1.5	30	0.015	6.30	4.30
SNR-5040-2R2T	2.2	30	0.019	4.90	3.80
SNR-5040-3R3M	3.3	20	0.024	3.95	3.40
SNR-5040-4R7M	4.7	20	0.030	3.50	3.00
SNR-5040-5R6M	5.6	20	0.035	3.00	2.80
SNR-5040-6R8M	6.8	20	0.043	2.90	2.50
SNR-5040-8R2M	6.8	20	0.048	2.70	2.30
SNR-5040-100M	10.0	20	0.064	0.06	2.10
SNR-5040-150M	15.0	20	0.086	2.00	2.00
SNR-5040-220M	22.0	20	0.129	1.60	1.50
SNR-5040-330M	33.0	20	0.188	0.33	1.20
SNR-5040-470M	47.0	20	0.272	1.10	1.00
SNR-5040-560M	68.0	20	0.400	0.90	0.80
SNR-5040-680M	100.0	20	0.560	0.75	0.70
SNR-5040-880M	150.0	20	0.750	0.65	0.60

■ ELECTRICAL CHARACTERISTICS

SNR-6028 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-6028-R82T	0.82	30	0.010	6.50	5.20
SNR-6028-1R0T	1.0	30	0.011	5.75	5.20
SNR-6028-1R5T	1.5	30	0.013	6.00	4.58
SNR-6028-2R2T	2.2	30	0.020	5.10	3.75
SNR-6028-3R3M	3.3	20	0.025	4.15	3.48
SNR-6028-4R7M	4.7	20	0.030	3.00	3.08
SNR-6028-5R6M	5.6	20	0.045	3.20	2.50
SNR-6028-6R8M	6.8	20	0.047	2.60	2.40
SNR-6028-8R2M	8.2	20	0.055	2.30	2.25
SNR-6028-100M	10.0	20	0.072	2.04	1.95
SNR-6028-120M	12.0	20	0.080	1.80	1.85
SNR-6028-150M	15.0	20	0.125	1.75	1.45
SNR-6028-180M	18.0	20	0.126	1.52	1.42
SNR-6028-220M	22.0	20	0.140	1.45	1.40
SNR-6028-330M	33.0	20	0.185	1.35	1.22
SNR-6028-470M	47.0	20	0.315	1.15	1.06
SNR-6028-560M	56.0	20	0.345	1.05	0.89
SNR-6028-680M	68.0	20	0.360	0.80	0.86
SNR-6028-820M	82.0	20	0.500	0.80	0.70
SNR-6028-101M	100.0	20	0.500	0.65	0.68

■ ELECTRICAL CHARACTERISTICS

SNR-6045 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-6045-R47T	0.47	30	0.006	15.00	6.50
SNR-6045-R56T	0.56	30	0.006	15.00	6.50
SNR-6045-R68T	0.68	30	0.006	11.00	5.70
SNR-6045-R82T	0.82	30	0.008	10.35	5.60
SNR-6045-1R0T	1.0	30	0.011	9.85	5.14
SNR-6045-1R2T	1.2	30	0.011	8.35	5.40
SNR-6045-1R5T	1.5	30	0.012	8.80	4.95
SNR-6045-1R8T	1.8	30	0.012	7.60	4.95
SNR-6045-2R2T	2.2	30	0.014	6.75	4.60
SNR-6045-2R7T	2.7	30	0.015	5.75	4.30
SNR-6045-3R3M	3.3	20	0.021	5.90	3.70
SNR-6045-3R6M	3.6	20	0.021	5.25	3.60
SNR-6045-4R3M	4.3	20	0.023	4.45	3.50
SNR-6045-4R7M	4.7	20	0.026	4.97	3.30
SNR-6045-5R1M	5.1	20	0.026	4.40	3.20
SNR-6045-5R6M	5.6	20	0.029	4.15	3.15
SNR-6045-6R2M	6.2	20	0.031	4.43	3.00
SNR-6045-6R8M	6.8	20	0.031	3.90	3.00
SNR-6045-8R2M	8.2	20	0.043	3.90	2.60
SNR-6045-100M	10.0	20	0.048	3.20	2.45
SNR-6045-120M	12.0	20	0.058	2.80	2.20
SNR-6045-150M	15.0	20	0.068	2.50	2.05
SNR-6045-180M	18.0	20	0.081	2.20	1.85
SNR-6045-220M	22.0	20	0.089	2.05	1.80
SNR-6045-270M	27.0	20	0.102	1.90	1.65
SNR-6045-330M	33.0	20	0.137	1.65	1.45
SNR-6045-390M	39.0	20	0.180	1.50	1.25
SNR-6045-470M	47.0	20	0.200	1.40	1.20
SNR-6045-560M	56.0	20	0.221	1.30	1.10
SNR-6045-620M	62.0	20	0.235	1.25	1.10
SNR-6045-680M	68.0	20	0.289	1.20	1.00
SNR-6045-820M	82.0	20	0.341	1.05	0.90
SNR-6045-101M	100.0	20	0.433	0.95	0.80
SNR-6045-121M	120.0	20	0.484	0.85	0.77
SNR-6045-151M	150.0	20	0.580	0.80	0.70
SNR-6045-221M	220.0	20	0.834	0.70	0.59
SNR-6045-331M	330.0	20	1.270	0.57	0.57
SNR-6045-471M	470.0	20	1.800	0.42	0.42
SNR-6045-681M	680.0	20	2.500	0.33	0.33

■ ELECTRICAL CHARACTERISTICS

SNR-8040 Series

Part Number	Inductance @100kHz, 1V(uH)	Tolerance (±%)	RDC (Ω) ±30%	Saturation Current (Isat) (A) Max.	Heat Rating Current (Irms) (A) Max.
SNR-8040-R82T	0.82	30	0.008	13.80	6.30
SNR-8040-1R0T	1.0	30	0.008	10.00	6.30
SNR-8040-1R2T	1.2	30	0.010	9.85	5.65
SNR-8040-1R5T	1.5	30	0.010	8.15	5.65
SNR-8040-2R0T	2.0	30	0.012	8.00	5.20
SNR-8040-2R2T	2.2	30	0.912	7.10	5.15
SNR-8040-3R0T	3.0	30	0.014	6.10	4.70
SNR-8040-3R3M	3.3	20	0.017	6.10	4.40
SNR-8040-3R6M	3.6	20	0.017	6.10	4.35
SNR-8040-3R9M	3.9	20	0.017	5.75	4.35
SNR-8040-4R7M	4.7	20	0.019	5.70	4.10
SNR-8040-5R1M	5.1	20	0.019	4.70	4.05
SNR-8040-5R6M	5.6	20	0.021	4.60	3.85
SNR-8040-6R2M	6.2	20	0.021	4.45	3.85
SNR-8040-6R8M	6.8	20	0.024	1.00	3.60
SNR-8040-8R2M	8.2	20	0.026	2.00	3.45
SNR-8040-100M	10.0	20	0.029	3.60	3.30
SNR-8040-120M	12.0	20	0.041	3.50	2.80
SNR-8040-150M	15.0	20	0.047	0.02	2.60
SNR-8040-180M	18.0	20	0.053	2.70	2.40
SNR-8040-220M	22.0	20	0.069	2.40	2.10
SNR-8040-270M	27.0	20	0.078	2.15	2.00
SNR-8040-330M	33.0	20	0.097	2.05	1.80
SNR-8040-390M	39.0	20	0.107	1.95	1.70
SNR-8040-430M	43.0	20	0.113	1.90	1.65
SNR-8040-470M	47.0	20	0.136	1.75	1.55
SNR-8040-560M	56.0	20	0.148	1.55	1.45
SNR-8040-620M	62.0	20	0.182	1.50	1.30
SNR-8040-680M	68.0	20	0.196	1.45	1.25
SNR-8040-820M	82.0	20	0.225	1.30	1.15
SNR-8040-101M	100.0	20	0.290	1.15	1.00
SNR-8040-121M	120.0	20	0.334	1.05	0.95
SNR-8040-151M	150.0	20	0.410	1.00	0.85
SNR-8040-181M	180.0	20	0.520	0.90	0.70
SNR-8040-221M	220.0	20	0.599	0.85	0.80
SNR-8040-331M	330.0	20	0.889	0.68	0.64
SNR-8040-471M	470.0	20	1.260	0.60	0.54
SNR-8040-681M	680.0	20	2.040	0.50	0.45
SNR-8040-102M	1000.0	20	2.800	0.40	0.35