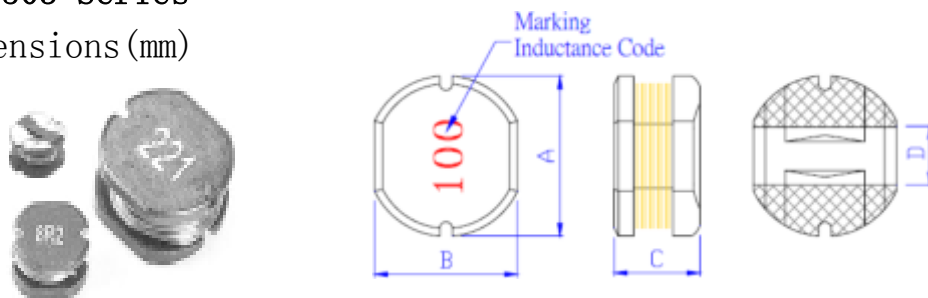


Surface Mount Unshielded Power Inductors SMR0503 Series

● SMR0503-Series

1. Dimensions (mm)



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.

NO.	A	B	C	D
Spec.	5.8 ± 0.3	5.2 ± 0.3	3.0 ± 0.3	1.5Typ.

2. Electrical characteristics

Part Number	Inductance (μH)	DCR (Ω) max	IDC (A) max
SMR0503-1R0M	$1.00 \pm 20\%$	0.03	4.50
SMR0503-1R2M	$1.20 \pm 20\%$	0.03	4.20
SMR0503-1R5M	$1.50 \pm 20\%$	0.03	4.10
SMR0503-1R8M	$1.80 \pm 20\%$	0.03	3.70
SMR0503-2R2M	$2.20 \pm 20\%$	0.03	3.50
SMR0503-2R7M	$2.70 \pm 20\%$	0.04	3.20
SMR0503-3R3M	$3.30 \pm 20\%$	0.05	2.80
SMR0503-3R9M	$3.90 \pm 20\%$	0.06	2.60
SMR0503-4R7M	$4.70 \pm 20\%$	0.07	2.50
SMR0503-5R6M	$5.60 \pm 20\%$	0.08	2.40
SMR0503-6R8M	$6.80 \pm 20\%$	0.09	2.20
SMR0503-8R2M	$8.20 \pm 20\%$	0.10	2.00
SMR0503-100M	$10.0 \pm 20\%$	0.12	1.80
SMR0503-120M	$12.0 \pm 20\%$	0.13	1.75
SMR0503-150M	$15.0 \pm 20\%$	0.15	1.70
SMR0502-180M	$18.0 \pm 20\%$	0.18	1.60

Part Number	Inductance (μH)	DCR (Ω) max	IDC (A) max
SMR0503-220M	22.0 ± 20%	0.22	1.50
SMR0503-270M	27.0 ± 20%	0.24	1.40
SMR0503-330M	33.0 ± 20%	0.30	1.10
SMR0503-390M	39.0 ± 20%	0.40	1.00
SMR0503-470M	47.0 ± 20%	0.43	0.90
SMR0503-560M	56.0 ± 20%	0.50	0.85
SMR0503-680M	68.0 ± 20%	0.60	0.80
SMR0503-820M	82.0 ± 20%	0.80	0.65
SMR0503-101K	100.0 ± 10%	0.90	0.60
SMR0503-121K	120.0 ± 10%	1.00	0.58
SMR0503-151K	150.0 ± 10%	1.30	0.43
SMR0503-181K	180.0 ± 10%	1.50	0.41
SMR0503-221K	220.0 ± 10%	2.00	0.38
SMR0503-271K	270.0 ± 10%	2.50	0.35
SMR0503-331K	330.0 ± 10%	3.20	0.28
SMR0503-391K	390.0 ± 10%	3.50	0.26
SMR0503-471K	470.0 ± 10%	4.20	0.20
SMR0503-561K	560.0 ± 10%	4.50	0.19
SMR0503-681K	680.0 ± 10%	6.00	0.18
SMR0503-821K	820.0 ± 10%	6.50	0.15
SMR0503-102K	1000.0 ± 10%	8.00	0.13
SMR0503-122K	1200.0 ± 10%	12.500	0.12

(1) Inductance is measured by LCR-meter 4284A/4286A (HP) or equivalent.

1. (2) Inductance test condition: Measurement Frequency for Inductance: 100KHz/1.0V

: 1.0μH~8.2μH:7.96MHz/0.5V, 10.0μH~82.0μH:2.52MHz/0.5V, More than 100.0μH at 1.0KHz/1.0V. (3) DC Resistance is measured by HP4338B Milliohms Meter or equivalent.

(4) Rated current is measured by LCR-meter 3260B (WK) & DC Bias 3265B(WK) at 1.0KHz/1.0V.

(5) 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).

(6) Operating temperature -55°C ~ +125°C. (7) All test data is referenced to 25°C ambient.