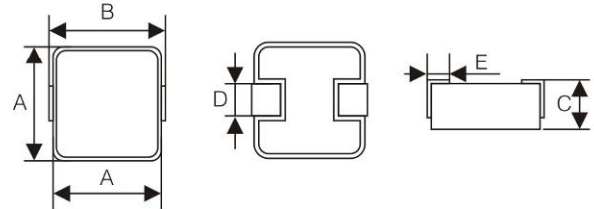




Shapes & Dimensions (Unit:mm)



Product Model	A	B	C	D	E
SMP0420	4.0±0.3	4.4±0.35	1.8±0.2	1.5±0.3	0.8±0.3
SMP0520	5.3±0.3	5.6±0.35	1.8±0.2	2.2±0.3	1.2±0.3
SMP0530	5.3±0.3	5.6±0.35	2.8±0.2	2.2±0.3	1.2±0.3
SMP0624	6.6±0.3	7.3±0.35	2.2±0.2	3.0±0.3	1.6±0.3
SMP0630	6.6±0.3	7.3±0.35	2.8±0.2	3.0±0.3	1.6±0.3
SMP0655	6.6±0.3	7.3±0.35	5.2±0.3	3.0±0.3	1.6±0.3
SMP0840	8.0±0.3	8.8±0.5	3.8±0.2	3.0±0.3	1.7±0.3
SMP1040	10.0±0.3	11.0±0.5	3.8±0.2	3.0±0.3	2.3±0.3
SMP1050	10.0±0.3	11.0±0.5	4.8±0.2	3.0±0.3	2.3±0.3
SMP1250	12.8±0.3	13.5±0.5	4.8±0.2	3.8±0.3	2.5±0.5
SMP1265	12.8±0.3	13.5±0.5	6.2±0.3	3.8±0.3	2.5±0.5
SMP1770	17.0±0.5	18.0±0.5	6.5±0.5	11.8±0.3	2.8±0.5

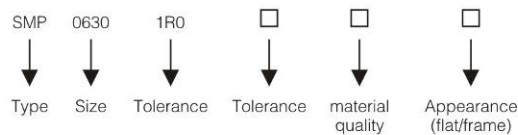
Features

- High product consistency and suitability for surface mount technology
- Frequency up to 5 MHz
- Lowest DC impedance for the size of the product
- High reliability and smooth saturation current sense drop
- Moulded, fully enclosed construction, significantly reducing noise and magnetic interference
- Lead-free and ROHS compliant

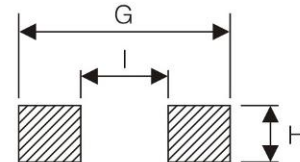
Applications

- High Quality DC-DC Power Converter
- Office automation equipment
- Power converters for notebook computers and other handheld electronic devices
- Power transmission equipment and industrial automation equipment

Product Identification



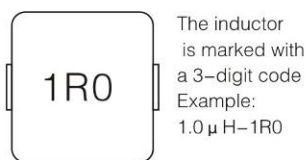
Recommend The Bonding Pad Size



Product Model	G(Reference value)	H(Reference value)	I(Reference value)
SMP04Series	5.2	2.5	2.2
SMP05Series	6.2	2.5	2.5
SMP06Series	8.4	3.5	3.5
SMP08Series	11.5	3.5	4.5
SMP10Series	13.6	4.0	5.4
SMP12Series	14.5	5.0	6.0
SMP17Series	20.0	14.5	10.0

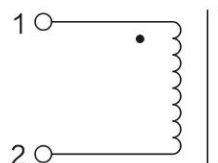
● The above sizes are for reference only

Marking



Electrical Schematics

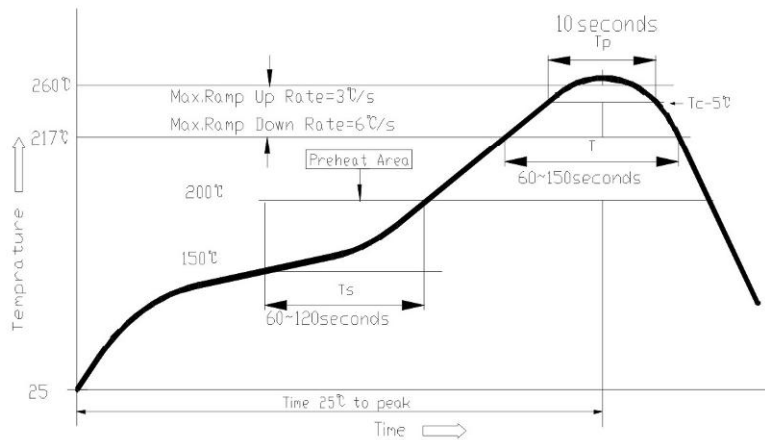
SCHEMATICS



Electrical Characteristics of Some Products

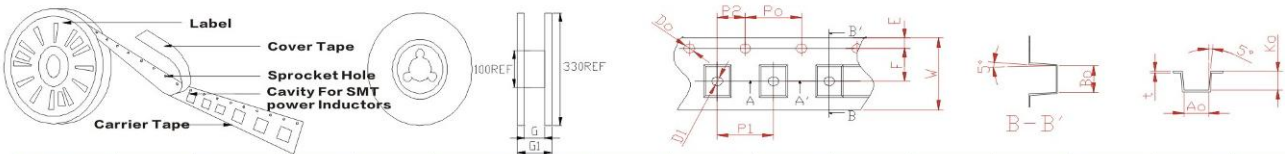
Product Specification	Inductance range μ H 100KHz/1v	DC Resistance Range Ω Max	Temperature rise current range A	Saturation Current Range A
SMP04	0.1 ~ 10	4 ~ 220	1.2 ~ 12	2 ~ 22
SMP05	0.47 ~ 15	12.5 ~ 200	1.7 ~ 9.0	2.8 ~ 16
SMP06	0.22 ~ 100	3.6 ~ 558	1.4 ~ 19	1.8 ~ 32
SMP08	0.47 ~ 100	3.5 ~ 445	1.5 ~ 12.5	2.9 ~ 20
SMP10	0.33 ~ 100	1.3 ~ 320	2.5 ~ 30	3.5 ~ 60
SMP12	0.33 ~ 100	1.2 ~ 170	3 ~ 30	5 ~ 74
SMP17	1 ~ 100	1.35 ~ 140	4.2 ~ 48	7 ~ 60

Recommended Soldering Technologies



- (1) Tolerance of Inductance: $N = \pm 30\%$, $M = \pm 20\%$, $K = \pm 10\%$.
- (2) All test data is referenced to $25 \pm 2^\circ\text{C}$ ambient.
- (3) The test condition of inductance value is 100KHz and 1V.
- (4) Operating Temperature Range -55°C to $+125^\circ\text{C}$.
- (5) DC current (Irms)(A) that will cause an approximate ΔT of 40°C .
- (6) DC current (Isat)(A) that will cause Lo to drop approximately 30%.
- (7) The part Temperature (ambient+temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace thickness and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- (8) The above inductance quantity and characteristic are only for reference, but also can be designed according to customer's requirement.

Packing Carrying Tape Size



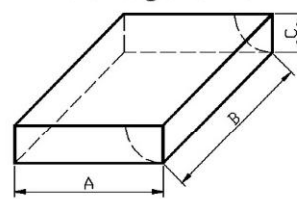
Product Specification	W ± 0.20	E ± 0.10	F ± 0.05	D0 $\pm 0.1/-0$	D1 $\pm 0.1/-0$	P0 ± 0.05	P1 ± 0.10	P2 ± 0.10	P0.10 ± 0.20	t ± 0.05	A0 ± 0.10	B0 ± 0.10	K0 ± 0.10	G ± 0.20	notes
SMP0420	12.00	1.75	5.50	1.50	1.50	4.00	8.00	2.00	40.00	0.30	4.30	4.40	2.30	12.5	
SMP0520	12.00	1.75	5.50	1.50	1.50	4.00	8.00	2.00	40.00	0.30	5.00	5.80	2.30	12.5	
SMP0530	16.00	1.75	5.50	1.50	1.50	4.00	8.00	2.00	40.00	0.30	5.00	5.80	3.20	12.5	
SMP0624	16.00	1.75	7.50	1.50	1.50	4.00	12.00	2.00	40.00	0.30	6.90	7.40	2.60	16.5	
SMP0630	16.00	1.75	7.50	1.50	1.50	4.00	12.00	2.00	40.00	0.30	6.90	7.40	3.30	16.5	
SMP0840	16.00	1.75	7.50	1.50	1.50	4.00	12.00	2.00	40.00	0.35	8.60	8.60	4.50	24.5	
SMP0850	16.00	1.75	7.50	1.50	1.50	4.00	12.00	2.00	40.00	0.35	8.60	8.60	5.50	24.5	
SMP1040	24.00	1.75	11.50	1.50	1.50	4.00	16.00	2.00	40.00	0.35	10.60	12.00	4.50	24.5	
SMP1050	24.00	1.75	11.50	1.50	1.50	4.00	16.00	2.00	40.00	0.35	10.60	12.00	5.50	24.5	
SMP1250	24.00	1.75	11.50	1.50	1.50	4.00	16.00	2.00	40.00	0.35	13.00	13.10	5.20	24.5	
SMP1265	24.00	1.75	11.50	1.50	1.50	4.00	16.00	2.00	40.00	0.35	13.00	13.10	6.70	24.5	
SMP1770	32.00	1.75	14.20	1.50	1.50	4.00	24.00	2.00	40.00	0.35	17.25	19.00	7.10	32.5	

Packing method

Product Specification	Minimum package per tray	Product Specification	Minimum package per tray
SMP0420	3000pcs/R	SMP0840	1000pcs/R
SMP0520	3000pcs/R	SMP1040	1000pcs/R
SMP0530	2000pcs/R	SMP1050	800pcs/R
SMP0624	1500pcs/R	SMP1250	500pcs/R
SMP0630	1500pcs/R	SMP1265	500pcs/R
SMP0655	1000pcs/R	SMP1770	300pcs/R

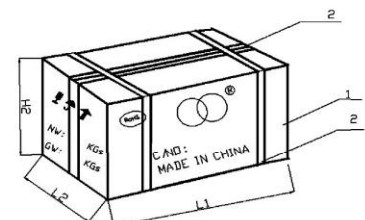
There are 20 spaces before and after the reel.

Package Size



Tape and Reel Box

A	B	C
338	350	85



Outer packing box

L1	L2	H2
373	355	280