

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPH10050 Series

Construction

- Metal alloy powder
- Shielded construction



Features

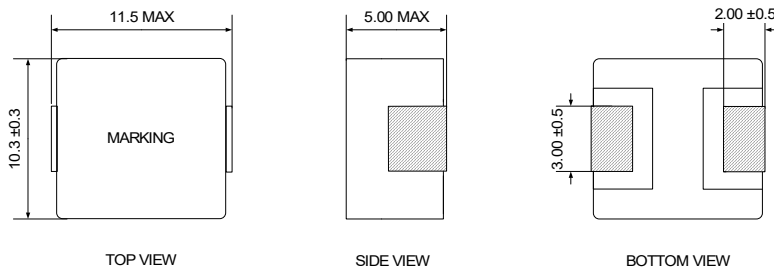
- Qualified to AEC-Q200
- Operating temperature -50 ~ +125°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



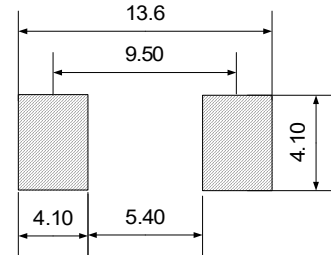
Applications

- Automotive / Noise filtering and filter chokes
- DC/DC converters
- Portable gaming devices / personal navigation systems
- multimedia devices
- Portable and devices

Dimensions (Unit:mm)



Recommended Land Pattern (Unit:mm)



Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ,MAX)	SRF(MHz,TYP)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH10050-R22M	0.22±20%	0.80	138.0	65.0	37.0	R22
SPH10050-1R0M	1.00±20%	3.00	47.0	30.0	23.0	1R0
SPH10050-1R5M	1.50±20%	3.80	34.0	25.0	21.0	1R5
SPH10050-2R2M	2.20±20%	6.00	23.0	19.0	15.0	2R2
SPH10050-3R3M	3.30±20%	10.0	19.0	16.0	13.0	3R3

※Test Equipment

*Inductance : MICROTTEST 6632 (100kHz, 1.0V)

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : MICROTTEST 6632 + 6240

*SRF : Agilent HP8753ES

*Specifications subject to change without notice. Please check our website for latest information.

*Notes

*1.Isat : DC current (A) that will cause L0 to drop approximately 30%

*2.Irms : DC current (A) that will cause an approximate ΔT of 40°C

Revised 01/02/25

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SPH10050-4R7M	4.70±20%	14.0	17.0	15.0	11.0	4R7
SPH10050-5R6M	5.60±20%	17.0	15.0	14.0	9.50	5R6
SPH10050-6R8M	6.80±20%	18.5	12.0	12.0	9.00	6R8
SPH10050-100M	10.0±20%	28.0	10.0	10.0	8.00	100
SPH10050-150M	15.0±20%	42.0	8.50	7.50	6.50	150
SPH10050-220M	22.0±20%	50.0	6.50	6.00	5.50	220
SPH10050-330M	33.0±20%	86.0	6.30	5.20	4.80	330
SPH10050-470M	47.0±20%	127.0	4.50	4.50	3.70	470
SPH10050-101M	100.0±20%	290.0	3.00	2.80	2.10	101

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