

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPH13050 Series

Construction

- Metal alloy powder
- Shielded construction



Features

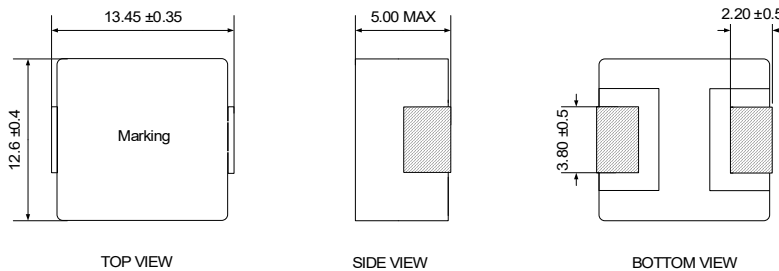
- Qualified to AEC-Q200
- Operating temperature -50 ~ +125°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



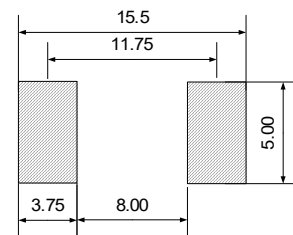
Applications

- 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
SPH13050-R22M	0.22±20%	0.70	132.0	75.0	50.0	R22
SPH13050-R36M	0.36±20%	0.90	82.0	50.0	42.0	R36
SPH13050-R50M	0.50±20%	1.30	64.0	48.0	38.0	R50
SPH13050-R68M	0.68±20%	1.70	52.0	46.0	33.0	R68
SPH13050-R82M	0.82±20%	2.00	50.0	39.0	30.0	R82

※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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SPH13050-1R0M	1.00±20%	2.20	43.0	35.0	26.0	1R0
SPH13050-1R5M	1.50±20%	3.20	39.0	33.0	23.0	1R5
SPH13050-2R2M	2.20±20%	5.00	24.0	24.0	15.0	2R2
SPH13050-3R3M	3.30±20%	7.00	23.0	22.0	14.0	3R3
SPH13050-4R7M	4.70±20%	9.00	15.0	20.0	13.0	4R7
SPH13050-6R8M	6.80±20%	18.0	14.0	16.0	12.0	6R8
SPH13050-8R2M	8.20±20%	20.0	11.0	13.0	9.50	8R2
SPH13050-100M	10.0±20%	22.0	8.50	12.0	9.00	100
SPH13050-150M	15.0±20%	30.0	8.00	10.0	8.00	150
SPH13050-220M	22.0±20%	58.0	6.50	6.50	4.50	220
SPH13050-330M	33.0±20%	84.0	5.00	6.00	3.50	330
SPH13050-470M	47.0±20%	130.0	4.00	5.00	3.00	470

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