

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPH10040 Series

Construction

- Metal alloy powder
- Shielded construction



Features

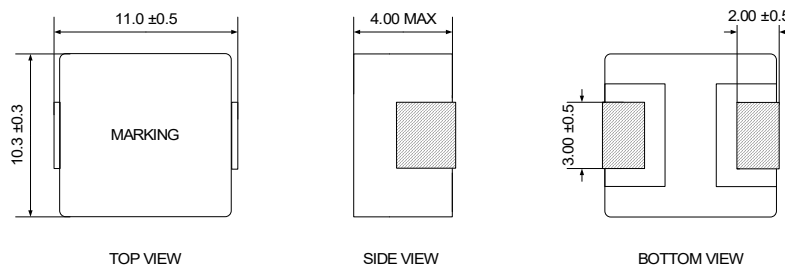
- Qualified to AEC-Q200
- Operating temperature -50 ~ +125°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



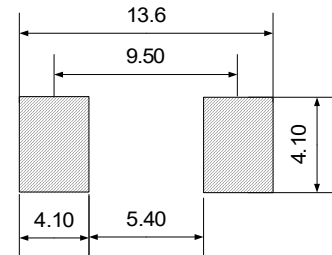
Applications

- 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
SPH10040-R15M	0.15±20%	0.65	179.0	75.0	45.0	R15
SPH10040-R22M	0.22±20%	1.00	155.0	65.0	35.0	R22
SPH10040-R30M	0.30±20%	1.10	101.0	45.0	33.0	R30
SPH10040-R36M	0.36±20%	1.20	99.0	42.0	30.0	R36
SPH10040-R47M	0.47±20%	1.70	80.0	40.0	29.0	R47

※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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SPH10040-R56M	0.56±20%	2.00	65.0	33.0	25.0	R56
SPH10040-R68M	0.68±20%	2.40	59.0	30.0	23.0	R68
SPH10040-R80M	0.80±20%	2.70	57.0	29.0	22.0	R80
SPH10040-1R0M	1.00±20%	3.30	48.0	28.0	19.0	1R0
SPH10040-1R5M	1.50±20%	4.20	41.5	24.0	16.0	1R5
SPH10040-2R2M	2.20±20%	7.00	30.0	16.5	12.0	2R2
SPH10040-3R3M	3.30±20%	12.0	21.0	16.0	11.0	3R3
SPH10040-4R7M	4.70±20%	20.0	20.0	13.0	9.00	4R7
SPH10040-5R6M	5.60±20%	22.0	15.0	12.0	8.50	5R6
SPH10040-6R8M	6.80±20%	25.0	13.0	11.5	8.30	6R8
SPH10040-8R2M	8.20±20%	27.0	12.5	9.00	8.00	8R2
SPH10040-100M	10.0±20%	30.0	12.0	8.50	7.80	100
SPH10040-150M	15.0±20%	45.0	8.00	7.00	6.50	150
SPH10040-220M	22.0±20%	66.0	7.50	5.50	5.00	220
SPH10040-330M	33.0±20%	92.0	5.00	4.80	4.40	330
SPH10040-470M	47.0±20%	145.0	4.50	3.50	3.30	470
SPH10040-680M	68.0±20%	195.0	3.80	3.00	2.50	680
SPH10040-101M	100.0±20%	340.0	3.40	2.30	2.00	101

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