

# SMD Power Inductor

## Fixed Inductor for Surface Mounting

## SPE5040 Series

### Construction

- SMD Magnetic-resin shielded type



### Features

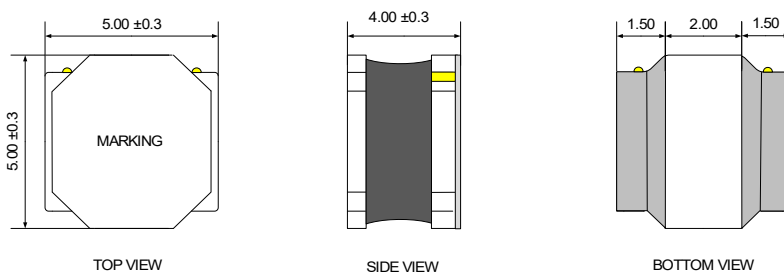
- Qualified to AEC-Q200
- Operating temperature -50 ~ +155°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Suitable for lead-free reflow soldering
- Available on tape and reel for automatic insertion



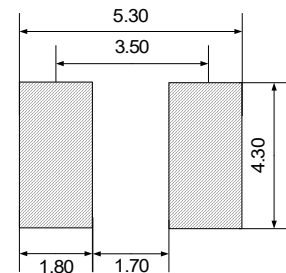
### Applications

- Automotive / PDA / Notebook systems
- DC/DC converters
- Portable gaming devices, personal navigation systems, personal multimedia devices

### Dimensions (Unit:mm)



### Recommended Land Pattern (Unit:mm)



### Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ, ±30%)	Isat*1(A, TYP)	Irms*2(A, TYP)	Marking
SPE5040-1R0N	1.00±30%	14.0	7.80	4.80	1R0
SPE5040-1R5N	1.50±30%	16.0	6.80	4.20	1R5
SPE5040-1R8N	1.80±30%	18.0	6.20	4.00	1R8
SPE5040-2R2N	2.20±30%	22.0	5.30	3.80	2R2
SPE5040-3R3N	3.30±30%	24.0	4.40	3.40	3R3

#### ※Test Equipment

\*Inductance : Agilent 4285A (100kHz, 1.0V)

\*DCR Meter : ABM3245 (20mΩ~2MΩ)

\*Bias Current : Agilent 4285A + Agilent 42841A

\*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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SPE5040-3R6N	3.60 $\pm$ 30%	28.0	4.20	3.20	3R6
SPE5040-4R7M	4.70 $\pm$ 20%	31.0	3.80	3.00	4R7
SPE5040-5R6M	5.60 $\pm$ 20%	37.0	3.40	2.80	5R6
SPE5040-6R8M	6.80 $\pm$ 20%	40.0	3.20	2.50	6R8
SPE5040-8R2M	8.20 $\pm$ 20%	57.0	2.70	2.20	8R2
SPE5040-100M	10.0 $\pm$ 20%	60.0	2.50	2.10	100
SPE5040-150M	15.0 $\pm$ 20%	100.0	1.90	1.70	150
SPE5040-220M	22.0 $\pm$ 20%	135.0	1.60	1.40	220
SPE5040-330M	33.0 $\pm$ 20%	220.0	1.30	1.00	330
SPE5040-470M	47.0 $\pm$ 20%	275.0	1.00	0.75	470
SPE5040-560M	56.0 $\pm$ 20%	395.0	0.90	0.70	560
SPE5040-680M	68.0 $\pm$ 20%	440.0	0.80	0.55	680
SPE5040-820M	82.0 $\pm$ 20%	545.0	0.75	0.50	820
SPE5040-101M	100.0 $\pm$ 20%	610.0	0.65	0.35	101
SPE5040-221M	220.0 $\pm$ 20%	1.65 $\Omega$	0.45	0.25	221
SPE5040-331M	330.0 $\pm$ 20%	2.70 $\Omega$	0.35	0.20	331
SPE5040-102M	1.00mH $\pm$ 20%	6.20 $\Omega$	0.20	0.15	102
SPE5040-222M	2.20mH $\pm$ 20%	14.0 $\Omega$	0.11	0.10	222

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