SMD Power Inductor

Fixed Inductor for Surface Mounting — SPE6045 Series

Construction

■ SMD Magnetic-resin shielded type

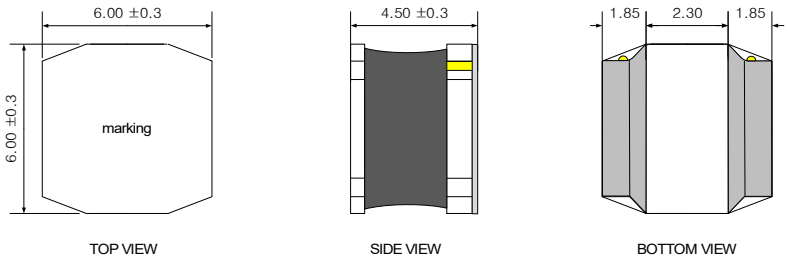
Features

■ 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

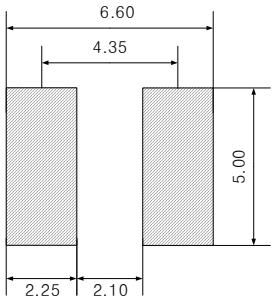
Applications

■ 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
SPE6045-R47N	0.47±30%	8.00	17.0	7.50	R47
SPE6045-1R0N	1.00±30%	10.0	11.5	5.10	1R0
SPE6045-1R5N	1.50±30%	11.0	10.0	4.90	1R5
SPE6045-1R8N	1.80±30%	12.0	9.30	4.80	1R8
SPE6045-2R2N	2.20±30%	14.0	8.50	4.60	2R2

※Test Equipment

*Inductance : Agilent 4285A (100kHz, 1.0V)
*DCR Meter : ABM3245 (20mΩ~2MΩ)
*Bias Current : Agilent 4285A + Agilent 42841A

***Notes**

*1.Isat : DC current (A) that will cause L0 to drop approximately 30%
*2.Irms : DC current (A) that will cause an approximate △T of 40℃

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

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Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ,±30%)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPE6045-3R0N	3.00±30%	17.0	7.60	4.20	3R0
SPE6045-3R3N	3.30±30%	20.0	7.30	4.00	3R3
SPE6045-3R6N	3.60±30%	23.0	6.80	3.70	3R6
SPE6045-4R7M	4.70±20%	25.0	6.30	3.30	4R7
SPE6045-5R6M	5.60±20%	30.0	5.80	3.10	5R6
SPE6045-6R8M	6.80±20%	31.0	5.50	3.00	6R8
SPE6045-7R5M	7.50±20%	35.0	5.00	2.70	7R5
SPE6045-8R2M	8.20±20%	37.0	4.80	2.60	8R2
SPE6045-100M	10.0±20%	47.0	4.40	2.40	100
SPE6045-120M	12.0±20%	52.0	4.00	2.20	120
SPE6045-150M	15.0±20%	66.0	3.60	2.00	150
SPE6045-220M	22.0±20%	90.0	3.00	1.80	220
SPE6045-330M	33.0±20%	137.0	2.50	1.40	330
SPE6045-470M	47.0±20%	187.0	2.00	1.20	470
SPE6045-560M	56.0±20%	221.0	1.90	1.10	560
SPE6045-680M	68.0±20%	287.0	1.70	0.90	680
SPE6045-820M	82.0±20%	326.0	1.40	0.85	820
SPE6045-101M	100.0±20%	433.0	1.30	0.80	101
SPE6045-221M	220.0±20%	850.0	0.80	0.55	221
SPE6045-331M	330.0±20%	1.15Ω	0.65	0.50	331
SPE6045-471M	470.0±20%	2.01Ω	0.55	0.45	471
SPE6045-152M	1.50mH±20%	5.50Ω	0.32	0.25	152
SPE6045-222M	2.20mH±20%	8.41Ω	0.24	0.15	222
SPE6045-472M	4.70mH±20%	24.5Ω	0.15	0.10	472

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