



Features

- Low profile & High Current capability
- Inductance range : 0.1 to 100μH
- AEC-Q200 qualified
- RoHS compliant

Applications

- Automotive systems :
 - Driver assistant / Entertainment / Lighting
- DC/DC converters
- Power supplies
- Noise suppression for motors

Molding Inductor - SPEM Series(4mm,5mm)

Electrical Specifications

Part Number	Inductance (μH)	DCR (Typical, mΩ)	DCR (Max, mΩ)	Saturation Rated Current (Typical, A)	Temperature Rise Current (Typical, A)
SPEM-040-20-R10	0.10	4.5	5.0	32.0	11.0
SPEM-040-20-R22	0.22	7.3	8.0	24.0	9.0
SPEM-040-20-R47	0.47	16.0	18.0	11.5	7.0
SPEM-040-20-1R0	1.0	21.0	24.0	8.5	5.3
SPEM-040-20-2R2	2.2	40.0	45.0	5.5	4.0
SPEM-040-20-3R3	3.3	53.0	60.0	4.5	3.5
SPEM-040-20-4R7	4.7	96.0	115.0	3.8	2.8
SPEM-040-20-5R6	5.6	115.0	130.0	3.5	2.8
SPEM-040-20-100	10.0	138.0	157.0	2.8	2.5
SPEM-050-30-1R0	1.00	13.0	14.0	11.0	7.0
SPEM-050-30-1R5	1.50	20.0	25.0	10.0	6.0
SPEM-050-30-2R2	2.20	29.0	35.0	9.0	5.0
SPEM-050-30-3R3	3.30	32.0	38.0	7.0	4.0
SPEM-050-30-4R7	4.70	60.0	65.0	5.0	3.5
SPEM-050-30-5R6	5.6	65.0	70.0	4.5	3.2
SPEM-050-30-100	10.0	126.0	140.0	3.6	2.8

Characteristics

Standard Atmospheric Condition

- § Ambient Temperature : 25°C
- § Relative Humidity : 65%
- § Air Pressure : 1013 hPa

Operation Temperature

- § Operation Temperature -55°C ~ 125°C
- § As the product temperature rises due to self-heating, the margin must be taken into account.
- § Storage Temperature -55°C ~ 125°C
- § Resistance to Soldering Heat +245°C for 10 sec.
- § Temperature Rise +40°C typ. At rated | rms
- § Inductance Drop 20% typ.at | sat

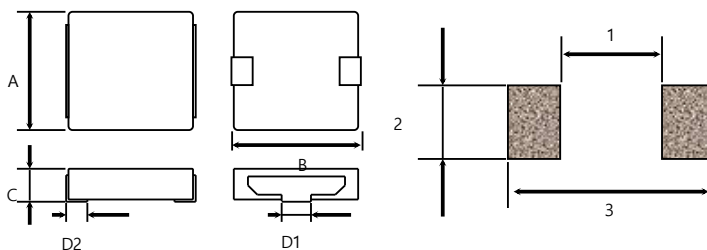
Identification

SPEM-050-30-4R7

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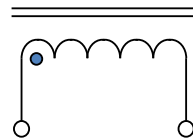
- ① Product name, SMD Power Inductor
- ② Dimension Width, mm
- ③ Dimension Height, mm
- ④ Inductance, R10 = 0.10uH

Product Dimensions



Series No.	A	B	C	D1	D2	1	2	3
SPEM 040-20 Series	4.0±0.2	4.1±0.4	2.0 max	1.5±0.3	0.8±0.3	2.2	2.5	5.2
SPEM 050-30 Series	5.1±0.2	5.5±0.3	3.0 max	1.5±0.3	1.0±0.3	3	2.5	7.0

Electrical Schematic



Quantity Info.

- § SPEM 040-20 series : 2,000pcs / Reel
- § SPEM 050-30 series : 1,000pcs / Reel