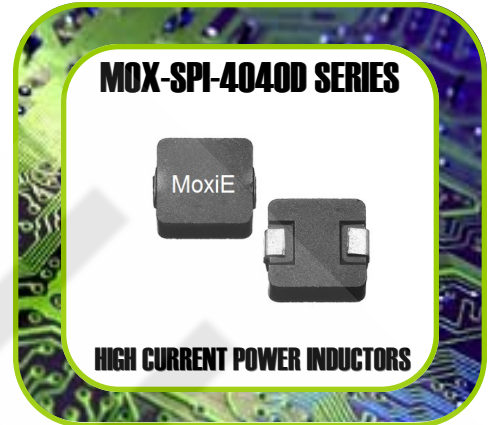


# MOX-SPI-4040D SERIES



## High Current Low Profile Surface Mount Power Inductors

- ◉ Low cost.
- ◉ High current iron powdered core.
- ◉ Low profile package design.
- ◉ Industrial operating temperature:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- ◉ Shielded construction.
- ◉ Tape & Reel packaging available. (500 pieces per reel)
- ◉ MoxiE custom designs available.
- ◉ RoHS compliant.



## NOTES

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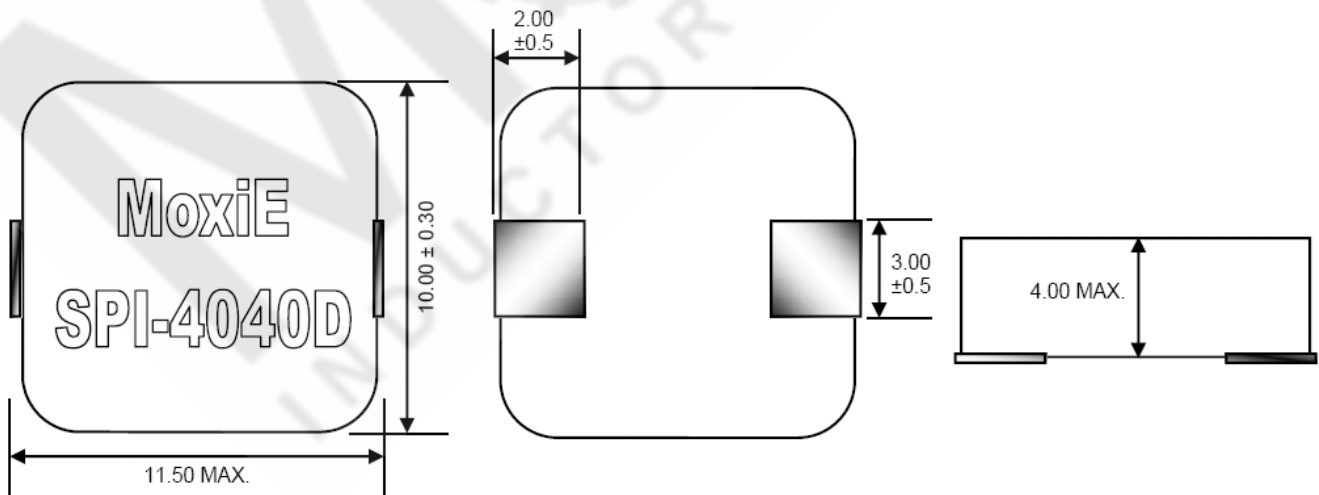
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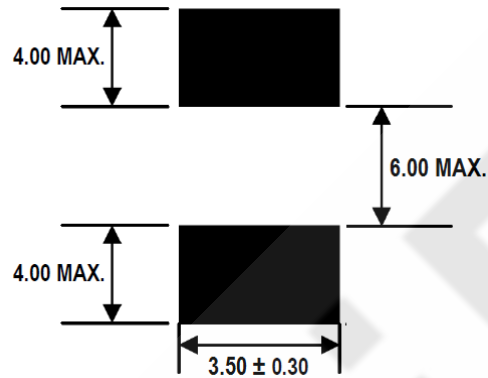
## MECHANICAL DIMENSIONS



# MOX-SPI-4040D SERIES



## LANDING PATTERN



## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Initial Inductance (μH) I <sub>dc</sub> = 0A	Tolerance (%)	Test Frequency	I <sub>rms</sub> (A) Maximum	I <sub>sat</sub> (A) Maximum	RDC (Ω) Typical	RDC (Ω) Maximum
MOX-SPI-4040D-R36M	0.36	20%	100KHZ, 1V	31.0	61.0	0.0011	0.0013
MOX-SPI-4040D-R45M	0.45	20%	100KHZ, 1V	29.0	31.0	0.0011	0.0013
MOX-SPI-4040D-R47M	0.47	20%	100KHZ, 1V	26.0	56.0	0.0016	0.0018
MOX-SPI-4040D-R56M	0.56	20%	100KHZ, 1V	23.0	51.0	0.0018	0.0022
MOX-SPI-4040D-R68M	0.68	20%	100KHZ, 1V	21.0	43.0	0.0024	0.0027
MOX-SPI-4040D-1R0M	1.00	20%	100KHZ, 1V	19.0	37.0	0.0035	0.0041
MOX-SPI-4040D-1R5M	1.50	20%	100KHZ, 1V	17.0	33.0	0.0045	0.0052
MOX-SPI-4040D-2R2M	2.20	20%	100KHZ, 1V	13.0	28.0	0.0069	0.0078
MOX-SPI-4040D-3R3M	3.30	20%	100KHZ, 1V	11.0	22.0	0.0108	0.0118
MOX-SPI-4040D-4R7M	4.70	20%	100KHZ, 1V	9.5	18.0	0.0150	0.0165
MOX-SPI-4040D-6R8M	6.80	20%	100KHZ, 1V	8.0	14.0	0.0212	0.0233
MOX-SPI-4040D-100M	10.00	20%	100KHZ, 1V	6.5	12.5	0.0275	0.0300

- I<sub>rms</sub>: DC current (A) that will cause an approximate ΔT of 40°C.
- Saturation: DC current (A) that will cause L<sub>o</sub> to drop approximately 20%.
- Packaging: Tape & Reel.
- RoHS Compliant.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating condition Circuit design 125°C under worst case operating conditions.
- Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- MoxiE Inductor Corporation specifications are subject to change without notice.