

# MOX-SPI-5050E SERIES

## High Current Low Profile Surface Mount Power Inductors

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



## NOTES

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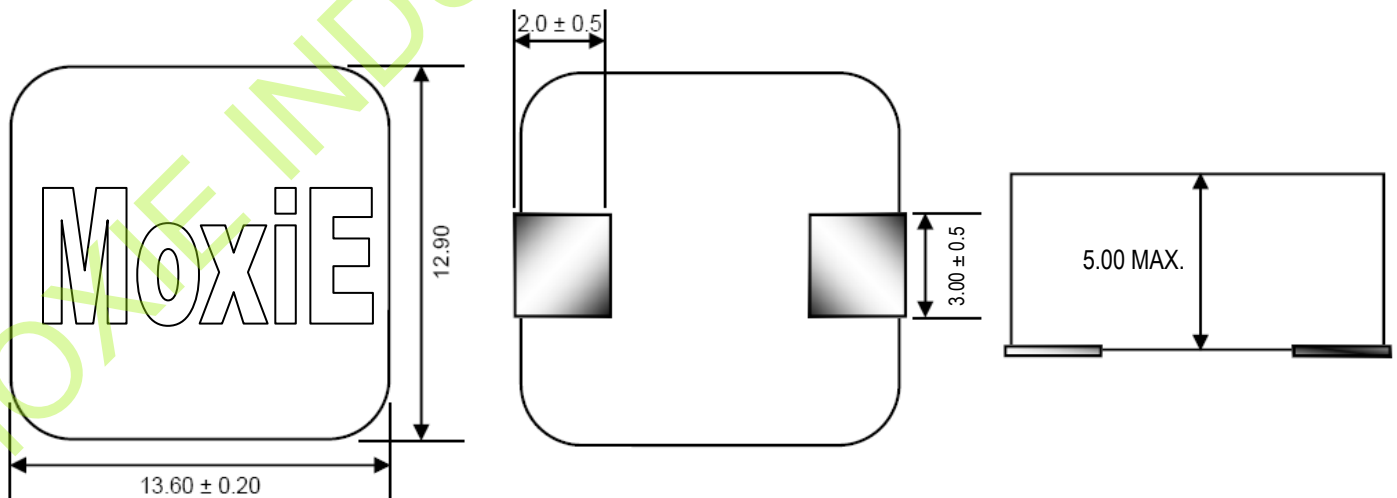
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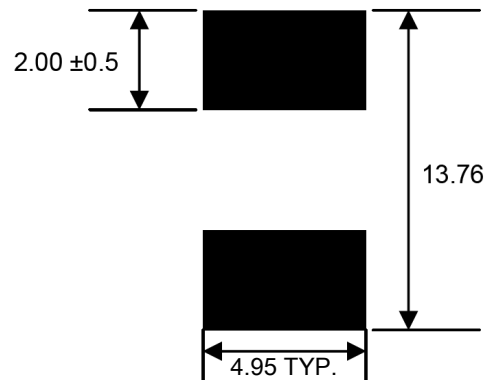
## MECHANICAL DIMENSIONS



# MOX-SPI-5050E SERIES



## LANDING PATTERN



## ELECTRICAL SPECIFICATIONS

MoxiE Part Number	*Initial Inductance (μH) Idc = 0A	Tolerance (%)	Test Frequency	I <sub>rms</sub> (A) Maximum	I <sub>sat</sub> (A) Maximum	RDC @ 25°C (Ω) Typical	RDC @ 25°C (Ω) Maximum
MOX-SPI-5050E-R10M	0.10	20%	100KHZ, 0.1V	56.00	118.00	0.00053	0.0006
MOX-SPI-5050E-R36M	0.36	20%	100KHZ, 0.1V	42.00	75.00	0.00085	0.0011
MOX-SPI-5050E-R47M	0.47	20%	100KHZ, 0.1V	38.00	65.00	0.0011	0.0013
MOX-SPI-5050E-R68M	0.68	20%	100KHZ, 0.1V	34.00	54.00	0.0015	0.0017
MOX-SPI-5050E-1R0M	1.00	20%	100KHZ, 0.1V	29.00	50.00	0.0021	0.0025
MOX-SPI-5050E-1R5M	1.50	20%	100KHZ, 0.1V	23.00	48.00	0.0034	0.0041
MOX-SPI-5050E-2R2M	2.20	20%	100KHZ, 0.1V	20.00	32.00	0.0046	0.0055
MOX-SPI-5050E-3R3M	3.30	20%	100KHZ, 0.1V	15.00	32.00	0.0077	0.0092
MOX-SPI-5050E-4R7M	4.70	20%	100KHZ, 0.1V	12.00	27.00	0.0128	0.0150
MOX-SPI-5050E-6R8M	6.80	20%	100KHZ, 0.1V	11.00	21.00	0.0154	0.0185
MOX-SPI-5050E-8R2M	8.20	20%	100KHZ, 0.1V	9.50	18.00	0.0189	0.0225
MOX-SPI-5050E-100M	10.00	20%	100KHZ, 0.1V	9.00	16.00	0.0214	0.0255

- \*MoxiE custom inductance values are available upon request. Please contact your sales representative for details.
- 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.