

MOX-SPI-5050 SERIES

MoxiE[®]
INDUCTOR CORPORATION

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.

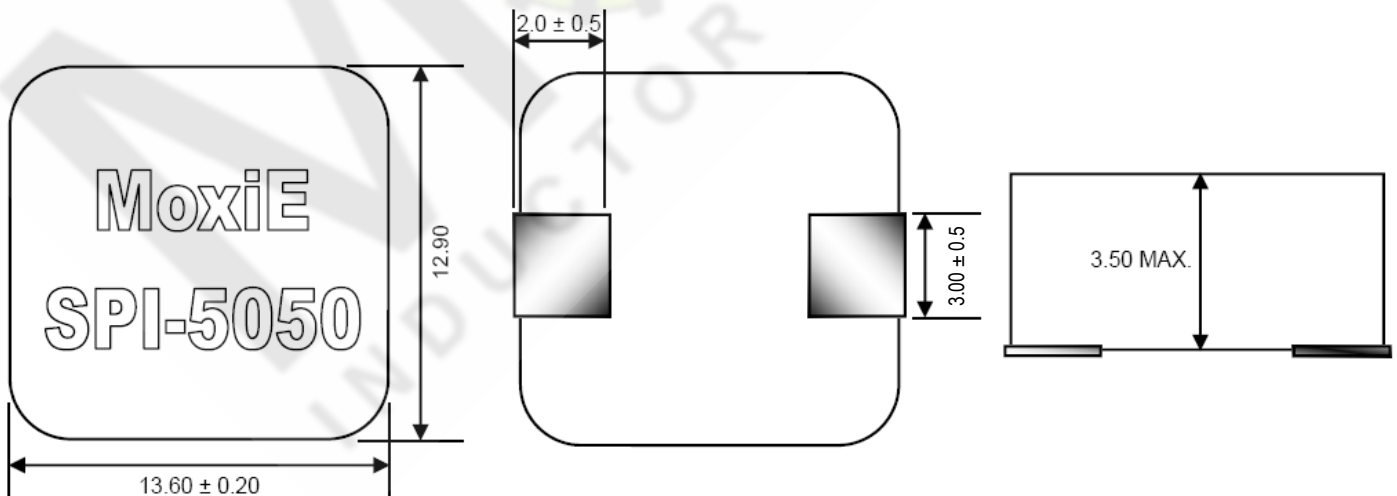


NOTES

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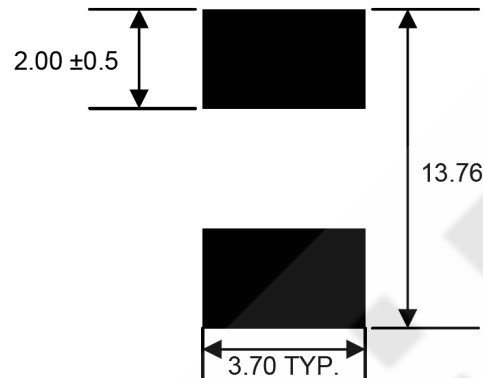
MECHANICAL DIMENSIONS



MOX-SPI-5050 SERIES



LANDING PATTERN



ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Initial Inductance (μH) I _{dc} = 0A	Tolerance (%)	Test Frequency	I _{rms} (A) Maximum	I _{sat} (A) Maximum	RDC (Ω) Typical	RDC (Ω) Maximum
MOX-SPI-5050-R10M	0.10	20%	100KHZ, 0.1V	42.0	81.0	0.0008	0.00096
MOX-SPI-5050-R22M	0.22	20%	100KHZ, 0.1V	38.0	66.0	0.0011	0.0013
MOX-SPI-5050-R33M	0.33	20%	100KHZ, 0.1V	36.0	63.0	0.0013	0.0015
MOX-SPI-5050-R47M	0.47	20%	100KHZ, 0.1V	32.0	56.0	0.0017	0.0020
MOX-SPI-5050-R68M	0.68	20%	100KHZ, 0.1V	28.0	50.0	0.0023	0.0025
MOX-SPI-5050-1R0M	1.00	20%	100KHZ, 0.1V	24.0	41.0	0.0033	0.0035
MOX-SPI-5050-1R5M	1.50	20%	100KHZ, 0.1V	19.0	36.0	0.0051	0.0055
MOX-SPI-5050-2R2M	2.20	20%	100KHZ, 0.1V	16.0	30.0	0.0072	0.0080
MOX-SPI-5050-3R3M	3.30	20%	100KHZ, 0.1V	12.0	28.0	0.0110	0.0120
MOX-SPI-5050-4R7M	4.70	20%	100KHZ, 0.1V	10.0	25.0	0.0143	0.0150
MOX-SPI-5050-6R8M	6.80	20%	100KHZ, 0.1V	9.00	19.0	0.0198	0.0220
MOX-SPI-5050-100M	10.00	20%	100KHZ, 0.1V	7.00	15.0	0.0304	0.0340

- I_{rms}: DC current (A) that will cause an approximate ΔT of 40°C.
- Saturation: DC current (A) that will cause L_o 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.