

MOX-SPI-5050F SERIES

High Current Low Profile Surface Mount Power Inductors

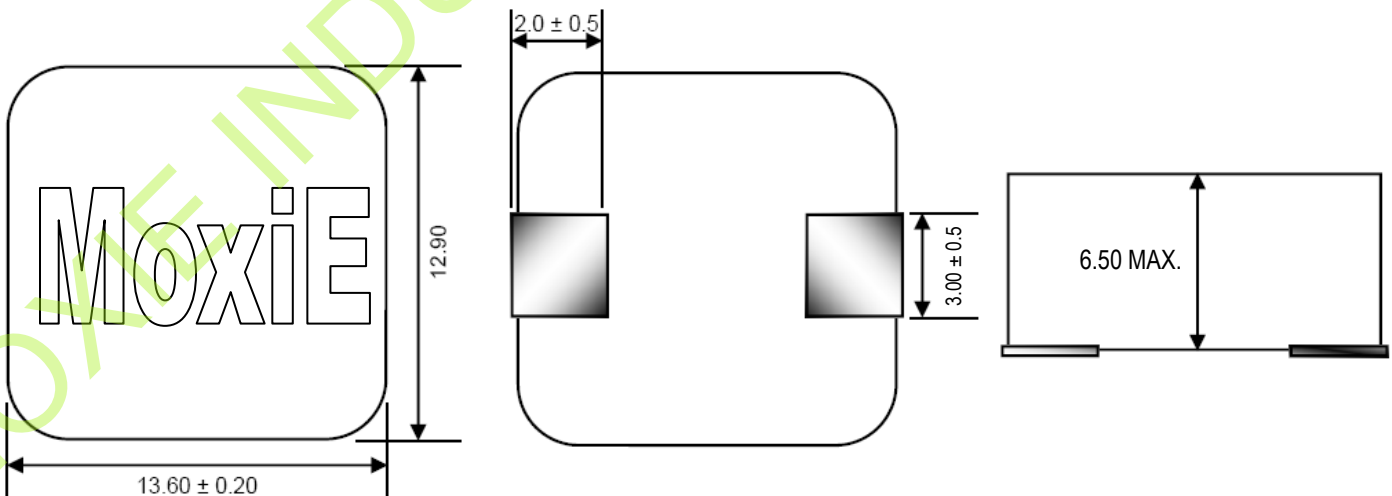
- Low cost.
- High current iron powdered core.
- Low profile package design.
- Industrial operating temperature: -55°C to +125°C.
- Shielded construction.
- Tape & Reel packaging available. (500 pieces per reel)
- MoxiE custom designs available.
- RoHS compliant.



NOTES



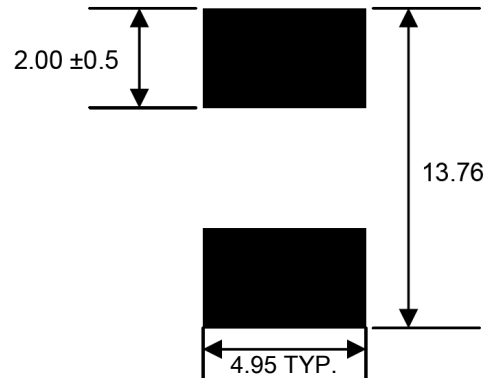
MECHANICAL DIMENSIONS



MOX-SPI-5050F 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-5050F-R10M	0.10	20%	100KHZ, 0.1V	60.0	120.0	0.00047	0.00050
MOX-SPI-5050F-R33M	0.33	20%	100KHZ, 0.1V	46.0	80.0	0.00083	0.00090
MOX-SPI-5050F-R36M	0.36	20%	100KHZ, 0.1V	45.0	78.0	0.00081	0.00095
MOX-SPI-5050F-R47M	0.47	20%	100KHZ, 0.1V	42.0	72.0	0.0010	0.0012
MOX-SPI-5050F-R68M	0.68	20%	100KHZ, 0.1V	37.0	60.0	0.0014	0.0015
MOX-SPI-5050F-1R0M	1.00	20%	100KHZ, 0.1V	32.0	50.0	0.0017	0.0018
MOX-SPI-5050F-1R5M	1.50	20%	100KHZ, 0.1V	26.0	43.0	0.0025	0.0030
MOX-SPI-5050F-2R2M	2.20	20%	100KHZ, 0.1V	23.0	40.0	0.0035	0.0040
MOX-SPI-5050F-3R3M	3.30	20%	100KHZ, 0.1V	20.0	35.0	0.0057	0.0065
MOX-SPI-5050F-4R7M	4.70	20%	100KHZ, 0.1V	16.0	30.0	0.0095	0.0112
MOX-SPI-5050F-6R8M	6.80	20%	100KHZ, 0.1V	12.0	20.0	0.0132	0.0140
MOX-SPI-5050F-8R2M	8.20	20%	100KHZ, 0.1V	11.0	18.0	0.0145	0.0150
MOX-SPI-5050F-100M	10.00	20%	100KHZ, 0.1V	10.0	17.0	0.0165	0.0172

- 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.