

MOX-SPI-1205

MoxiE
INDUCTOR CORPORATION

MoxiE's MOX-SPI-1205 series shielded surface mount power inductors are engineered to offer a low DC resistance that are ideal for large current applications. The robust package allows for high energy storage with low power loss and low noise. Maximum temperature range of 125°C.



Features:

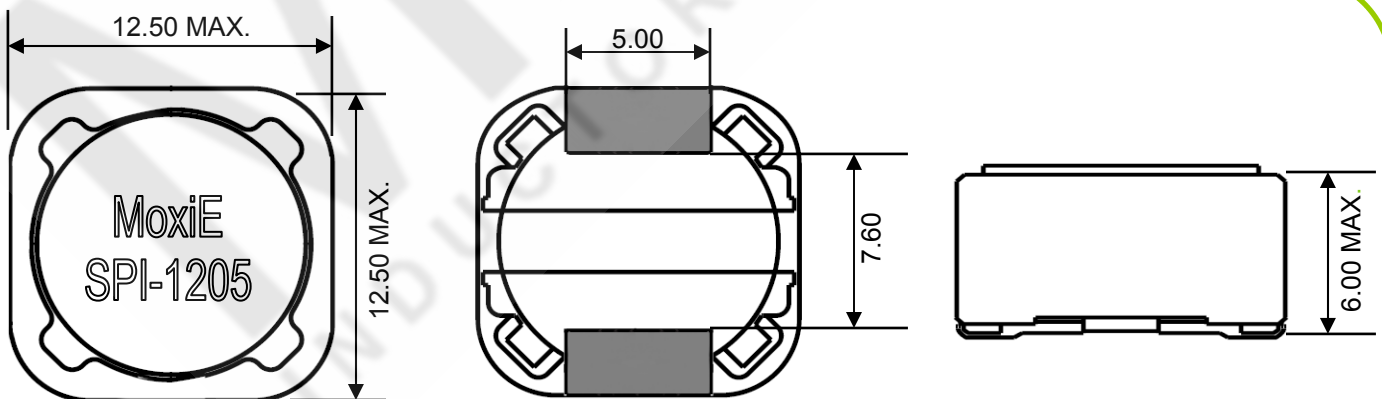
- Magnetically shielding available.
- Ideal for a variety of DC to DC converter applications.
- Ferrite core material.
- Low cost.
- RoHS compliant.
- Available on tape & reel for auto surface mounting.



NOTES



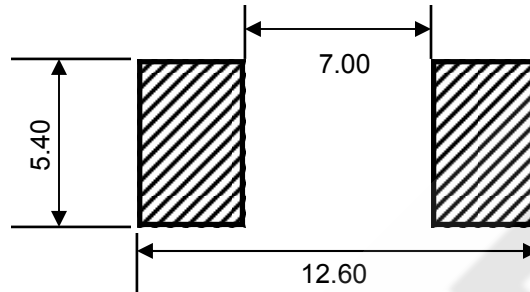
MECHANICAL DIMENSIONS





LANDING PATTERN & CONSTRUCTION

NOTE:
ALL DIMENSIONS
ARE IN MM.



MOX-SPI-1205 ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (µH)	Test Frequency	Tolerance (±)	DCR (mΩ) Typ.	DCR (mΩ) Max.	SRF (MHz) Typ.	Isat (A) 10% drop	Isat (A) 20% drop	Isat (A) 30% drop	Irms (A) 20° rise	Irms (A) 40° rise
MOX-SPI-1205-100M	10.0	100.0 KHz	20%	21.5	23.9	22.0	6.19	6.93	7.45	3.05	4.05
MOX-SPI-1205-120M	12.0	100.0 KHz	20%	24.5	27.2	20.0	5.19	5.95	6.45	2.85	3.72
MOX-SPI-1205-150M	15.0	100.0 KHz	20%	30.7	34.1	18.0	4.81	5.42	5.79	2.65	3.52
MOX-SPI-1205-180M	18.0	100.0 KHz	20%	35.4	39.2	16.0	4.59	5.23	5.65	2.55	3.32
MOX-SPI-1205-220M	22.0	100.0 KHz	20%	36.6	40.2	15.0	4.07	4.64	4.98	2.35	3.12
MOX-SPI-1205-270M	27.0	100.0 KHz	20%	51.5	57.0	13.0	3.53	3.97	4.29	2.15	2.92
MOX-SPI-1205-330M	33.0	100.0 KHz	20%	54.9	61.0	12.2	3.23	3.75	4.04	2.05	2.74
MOX-SPI-1205-390M	39.0	100.0 KHz	20%	58.0	64.2	12.0	3.09	3.57	3.82	1.95	2.62
MOX-SPI-1205-470M	47.0	100.0 KHz	20%	80.1	89.0	11.5	2.67	3.05	3.32	1.88	2.54
MOX-SPI-1205-560M	56.0	100.0 KHz	20%	82.5	91.2	10.4	2.55	2.97	3.18	1.75	2.41
MOX-SPI-1205-680M	68.0	100.0 KHz	20%	94.5	105.0	10.0	2.41	2.71	2.96	1.70	2.32
MOX-SPI-1205-820M	82.0	100.0 KHz	20%	131.5	146.1	8.6	2.17	2.47	2.68	1.65	2.23
MOX-SPI-1205-101M	100.0	100.0 KHz	20%	141.7	157.2	7.7	1.89	2.17	2.35	1.55	2.14
MOX-SPI-1205-121M	120.0	100.0 KHz	20%	193.2	214.2	6.8	1.72	1.94	2.15	1.40	1.89
MOX-SPI-1205-151M	150.0	100.0 KHz	20%	215.1	239.2	6.3	1.59	1.82	1.99	1.23	1.67
MOX-SPI-1205-181M	180.0	100.0 KHz	20%	254.0	282.2	6.1	1.42	1.62	1.74	1.15	1.59
MOX-SPI-1205-221M	220.0	100.0 KHz	20%	314.0	349.0	5.5	1.29	1.45	1.58	1.04	1.45
MOX-SPI-1205-271M	270.0	100.0 KHz	20%	368.2	409.4	4.3	1.12	1.26	1.39	0.92	1.47
MOX-SPI-1205-331M	330.0	100.0 KHz	20%	481.2	534.4	4.0	1.02	1.15	1.25	0.87	1.18
MOX-SPI-1205-391M	390.0	100.0 KHz	20%	517.2	575.0	3.5	0.95	1.07	1.18	0.79	1.09
MOX-SPI-1205-471M	470.0	100.0 KHz	20%	721.1	801.2	3.0	0.88	0.99	1.08	0.72	0.98
MOX-SPI-1205-561M	560.0	100.0 KHz	20%	773.0	859.0	2.8	0.82	0.95	1.05	0.68	0.89
MOX-SPI-1205-681M	680.0	100.0 KHz	20%	867.2	964.0	2.6	0.75	0.87	0.94	0.58	0.82
MOX-SPI-1205-821M	820.0	100.0 KHz	20%	1157.0	1286.0	2.5	0.67	0.78	0.85	0.54	0.74
MOX-SPI-1205-102M	1000.0	100.0 KHz	20%	1272.0	1413.0	2.3	0.62	0.71	0.75	0.49	0.69

- MoxiE test instruments: L: HP4192A LF IMEDANCE ANALYZER DC: CHEN HWA 502BC.
- RATED CURRENT: HP4284+42841A or CH1061+CH301A
- DCR limits @ 20°C.
- Peak current for an approximate ▲T of 40°C without core loss, MoxiE recommends that the temperature of this part not exceed 125°C.
- Peak current for approximate 30% roll off at 20°C.
- RoHS Compliant.
- MoxiE Inductor Corporation specifications are subject to change without notice.