

MOX-SPI-1204



MoxiE[®]
INDUCTOR CORPORATION

Surface Mount Shielded Power Inductors

MoxiE's SPI-1204 series of surface mount shielded power inductors are widely used in PDA's, notebooks, LCD televisions and digital cameras. MoxiE offers a ultra low profile magnetically shielded package that offer high inductance & high power.

Features:

- Low cost.
- Available tolerances: $\pm 20\%$.
- RoHS compliant.
- Magnetically shielded applications.
- MoxiE custom designs available.

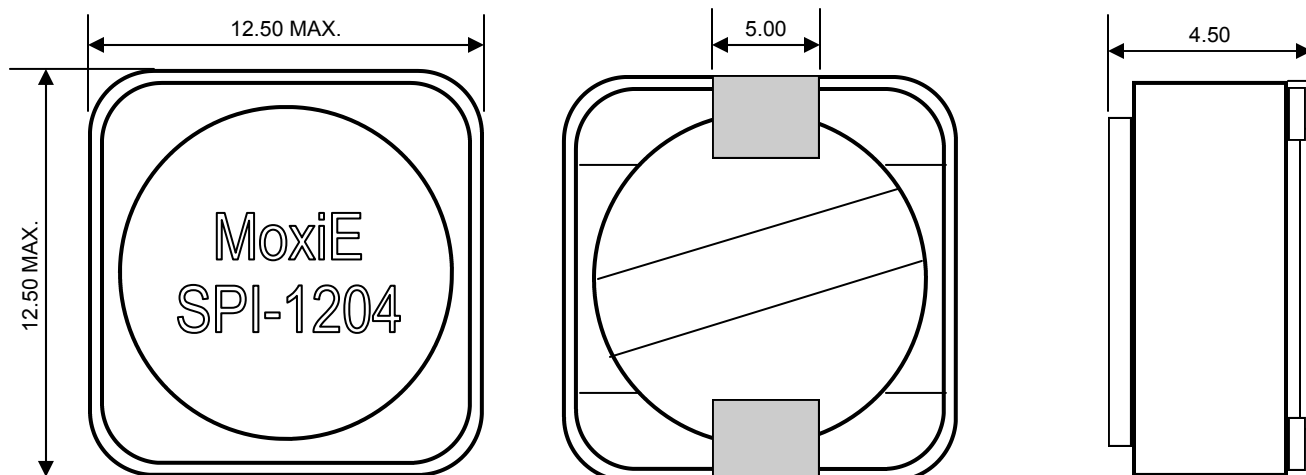


NOTES

- Measuring Frequency (L) 1 kHz/1V.
- Available Tolerances: M= $\pm 20\%$.
- Storage temperature range: -40°C to $+125^{\circ}\text{C}$.
- Operating ambient temperature range: -40°C to $+130^{\circ}\text{C}$.
- DC current at which the inductance drops 35% (typical) from its value without current.
- Solder reflow temperature: $+260^{\circ}\text{C}$ max. for 10 seconds max.
- Open circuit inductance test parameters: 100KHz, 0.25Vrms, 0.0Adc.
- RMS current for an approximate AT of 40°C without core loss. It is recommended that the temperature of the part not exceed 130°C .
- Peak current for approximate 30% roll off at 20°C .
- Temperature rise of 40°C maximum.
- DCR limits @ 20°C .
- MoxiE Inductor Corporation specifications are subject to change without notice.



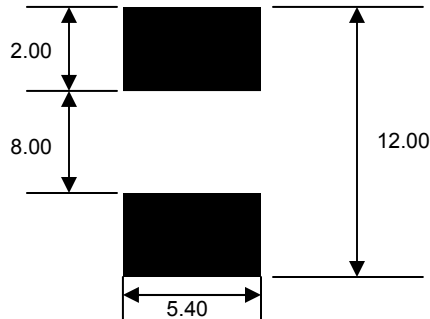
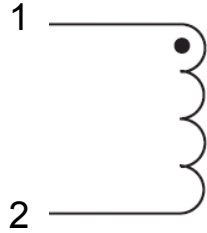
MECHANICAL DIMENSIONS



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LANDING PATTERN & SCHEMATIC



MOX-SPI-1204 CONSTRUCTION



ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance @0ADC (μH)	I _{rated} (ADC)	DCR (mΩ)		Saturation Current -25% (A)	Heating Current +40°C (A)	Core Loss Factor (K2)	SRF (MHz)
			TYP.	MAX.				
MOX-SPI-1204-0R5M	0.5	14	1.9	2.3	18	14	100	>40
MOX-SPI-1204-1R0M	1.0	11.5	3.0	3.7	14	11	150	>40
MOX-SPI-1204-1R6M	1.6	8.5	5.4	6.3	10	8.5	180	>40
MOX-SPI-1204-2R4M	2.4	7.5	6.9	8.1	8.3	7.7	220	>40
MOX-SPI-1204-3R3M	3.3	6.5	9.5	11	7.4	6.4	260	>40
MOX-SPI-1204-4R7M	4.7	6.2	11	13	6.5	6.0	310	35
MOX-SPI-1204-5R6M	5.6	5.7	13	15	5.7	5.5	340	30
MOX-SPI-1204-6R8M	6.8	4.8	18	22	5.4	4.6	370	27
MOX-SPI-1204-100M	10	3.6	29	35	4.1	3.8	440	21
MOX-SPI-1204-120M	12	3.5	32	37	3.8	3.5	490	19
MOX-SPI-1204-150M	15	3.2	40	47	3.5	3.1	570	17
MOX-SPI-1204-180M	18	2.8	48	58	2.9	2.8	590	15
MOX-SPI-1204-220M	22	2.6	55	67	2.8	2.6	640	13
MOX-SPI-1204-270M	27	2.5	67	79	2.4	2.4	740	12
MOX-SPI-1204-330M	33	2.3	76	94	2.2	2.2	820	11
MOX-SPI-1204-390M	39	1.9	101	126	2.1	1.9	880	10
MOX-SPI-1204-470M	47	1.8	112	140	1.9	1.8	980	9.0
MOX-SPI-1204-560M	56	1.7	129	157	1.8	1.7	1000	8.0
MOX-SPI-1204-680M	68	1.6	169	202	1.6	1.7	1200	7.0
MOX-SPI-1204-820M	82	1.5	191	232	1.4	1.5	1300	6.0
MOX-SPI-1204-101M	100	1.2	222	270	1.3	1.4	1400	6.0
MOX-SPI-1204-121M	120	1.1	252	316	1.1	1.4	1500	5.5
MOX-SPI-1204-151M	150	1.0	346	456	1.0	1.1	1700	4.9
MOX-SPI-1204-181M	180	0.95	385	497	0.90	1.1	1900	4.4
MOX-SPI-1204-221M	220	0.80	506	681	0.80	0.93	2100	3.7
MOX-SPI-1204-271M	270	0.70	596	775	0.75	0.85	2300	3.3
MOX-SPI-1204-331M	330	0.65	764	955	0.66	0.77	2600	2.8
MOX-SPI-1204-391M	390	0.63	870	1087	0.62	0.71	2800	2.6
MOX-SPI-1204-471M	470	0.57	1150	1403	0.58	0.61	3100	2.4
MOX-SPI-1204-561M	560	0.55	1283	1623	0.53	0.58	3300	2.2
MOX-SPI-1204-681M	680	0.50	1493	1824	0.50	0.54	3700	2.1
MOX-SPI-1204-821M	820	0.45	1924	2355	0.45	0.48	4000	1.7
MOX-SPI-1204-102M	1000	0.40	2174	2850	0.40	0.45	4500	1.5