

MOX-SPI-0704

MoxiE[®]
INDUCTOR CORPORATION

Surface Mount Shielded Power Inductors

MoxiE's SPI-0704 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.

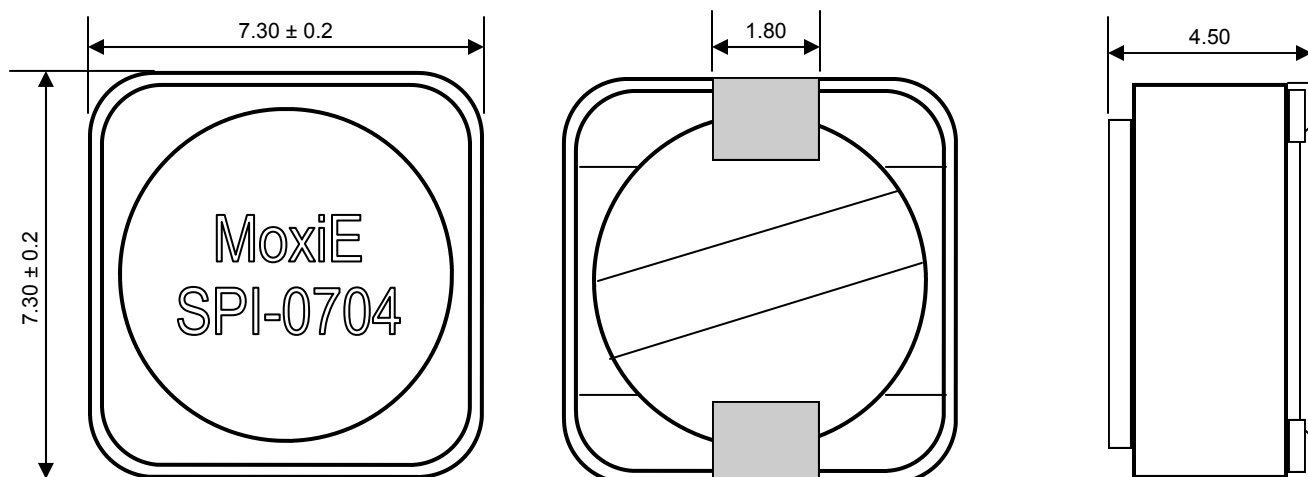


NOTES

- 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.



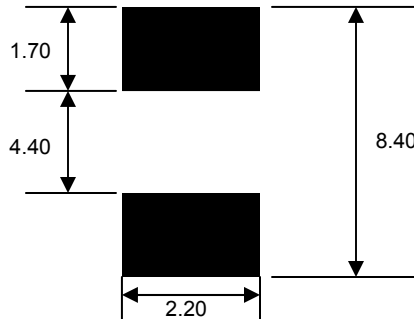
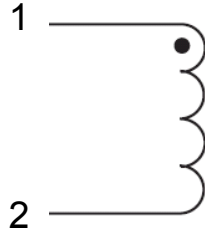
MECHANICAL DIMENSIONS



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LANDING PATTERN & SCHEMATIC



MOX-SPI-0704 CONSTRUCTION



ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (µH)	Test Frequency	I _{rms} (A)	I _{sat} (A) Peak	DCR (Ω) Typ.	Volt-µSec Typ.
MOX-SPI-0704-R33M	0.33	1 KHz/1V	6.26	18.4	0.0073	1.70
MOX-SPI-0704-1R0M	1.00	1 KHz/1V	5.39	10.2	0.0097	3.09
MOX-SPI-0704-1R5M	1.50	1 KHz/1V	4.94	8.35	0.0118	3.76
MOX-SPI-0704-2R2M	2.20	1 KHz/1V	4.76	7.06	0.0126	4.45
MOX-SPI-0704-3R3M	3.30	1 KHz/1V	3.94	5.40	0.0182	5.82
MOX-SPI-0704-4R7M	4.70	1 KHz/1V	3.34	4.37	0.0254	7.18
MOX-SPI-0704-6R8M	6.80	1 KHz/1V	2.60	3.67	0.0418	8.55
MOX-SPI-0704-8R2M	8.20	1 KHz/1V	2.53	3.41	0.0441	9.25
MOX-SPI-0704-100M	10.0	1 KHz/1V	2.41	3.17	0.0489	9.92
MOX-SPI-0704-150M	15.0	1 KHz/1V	2.13	2.49	0.0637	12.8
MOX-SPI-0704-220M	22.0	1 KHz/1V	1.75	2.13	0.0925	14.7
MOX-SPI-0704-330M	33.0	1 KHz/1V	1.41	1.73	0.143	18.2
MOX-SPI-0704-470M	47.0	1 KHz/1V	1.15	1.41	0.216	22.2
MOX-SPI-0704-680M	68.0	1 KHz/1V	1.03	1.20	0.265	26.3
MOX-SPI-0704-820M	82.0	1 KHz/1V	0.91	1.12	0.345	28.5
MOX-SPI-0704-101M	100	1 KHz/1V	0.86	0.99	0.383	31.8
MOX-SPI-0704-151M	150	1 KHz/1V	0.69	0.81	0.591	38.6
MOX-SPI-0704-221M	220	1 KHz/1V	0.56	0.66	0.907	47.7
MOX-SPI-0704-331M	330	1 KHz/1V	0.45	0.54	1.42	57.8
MOX-SPI-0704-471M	470	1 KHz/1V	0.40	0.46	1.74	68.2
MOX-SPI-0704-681M	680	1 KHz/1V	0.34	0.38	2.58	81.7
MOX-SPI-0704-821M	820	1 KHz/1V	0.32	0.36	2.89	89.9
MOX-SPI-0704-102M	1000	1 KHz/1V	0.28	0.32	3.90	100.0