

MOX-API-SERIES

HIGH CURRENT METAL ALLOY POWER INDUCTORS

MoxiE's API series of power inductors are designed to provide ultra high current and low DCR. The metal alloy construction is ideal for DC/DC converters, communication devices & industrial electronics.

Features

- Molded inductor with metal alloy powder construction.
- Small copper loss design.
- Large current and low DCR.
- Ultra low buzz noise.

MoxiE[®]
INDUCTOR CORPORATION

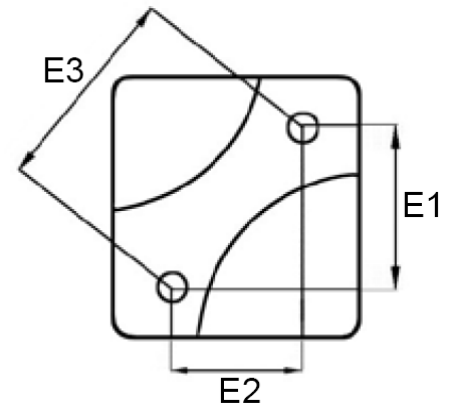
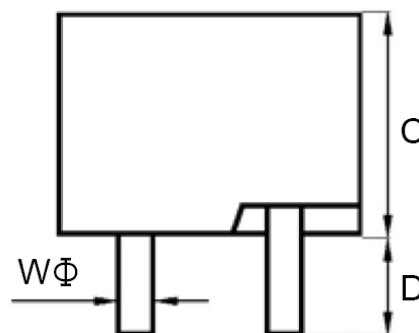
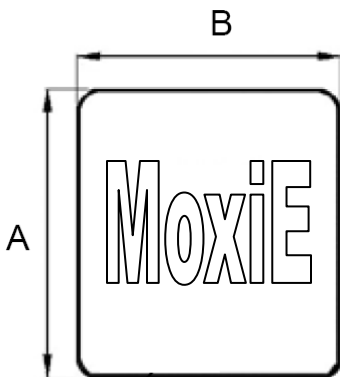


AVAILABLE PACKAGE TYPES

MoxiE Part Number	A	B	C	D	E1	E2	E3	WΦ
MOX-API-0705	6.80 ±0.3	6.80 ±0.3	9.00 MAX.	3.40 ±0.5	4.00	4.00	5.66	0.6~0.9
MOX-API-0805	8.30 ±0.3	8.30 ±0.3	10.00 MAX.	3.40 ±0.5	4.00	6.00	7.20	0.7~1.0
MOX-API-1005	10.50 ±0.3	10.50 ±0.3	9.50 MAX.	3.40 ±0.5	4.50	6.00	7.50	0.8~1.3
MOX-API-1105	11.50 ±0.3	11.50 ±0.3	9.50 MAX.	3.40 ±0.5	6.20	6.90	9.27	0.8~1.6
MOX-API-1205	12.00 ±0.3	12.00 ±0.3	10.00 MAX.	3.40 ±0.5	6.00	7.30	9.50	0.8~1.7
MOX-API-1305	13.50 ±0.3	12.50 ±0.3	10.00 MAX.	3.40 ±0.5	6.50	7.60	10.00	1.0~1.8
MOX-API-1405	14.00 ±0.5	14.00 ±0.5	12.50 MAX.	3.40 ±0.5	8.80	8.80	12.50	1.0~2.0
MOX-API-1605	16.50 ±0.5	16.50 ±0.5	13.50 MAX.	3.40 ±0.5	9.50	9.50	13.50	1.0~2.0



MECHANICAL DIMENSIONS



NOTE:
ALL DIMENSIONS IN MM

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ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR mΩ Max. (Typ.)	DCR mΩ Max. (Max.)	Isat (A Max.)	Irms (A Max.)
MOX-API-0705-R27M	0.27	1.60	2.00	22.0	37.0
MOX-API-0705-R40M	0.40	2.00	2.40	21.0	35.0
MOX-API-0705-1R0M	1.00	3.50	4.00	16.0	25.0
MOX-API-0705-1R2M	1.20	3.90	4.30	15.0	22.0
MOX-API-0705-1R6M	1.60	5.60	6.40	12.0	20.0
MOX-API-0805-R80M	0.80	2.30	2.70	20.0	28.0
MOX-API-0805-1R0M	1.00	2.80	3.30	20.0	25.0
MOX-API-0805-1R2M	1.20	3.30	3.70	18.0	24.0
MOX-API-0805-1R5M	1.50	4.00	4.50	15.0	21.0
MOX-API-0805-2R0M	2.00	4.60	5.20	13.0	18.0
MOX-API-0805-3R0M	3.00	7.30	7.90	11.0	15.0
MOX-API-1005-R30M	0.30	0.80	1.05	30.0	45.0
MOX-API-1005-R47M	0.47	1.00	1.30	30.0	40.0
MOX-API-1005-R68M	0.68	1.20	1.60	28.0	35.0
MOX-API-1005-1R0M	1.00	1.70	2.10	23.0	30.0
MOX-API-1005-1R2M	1.20	2.00	2.50	22.0	27.0
MOX-API-1005-1R5M	1.50	2.40	2.90	21.0	25.0
MOX-API-1005-1R8M	1.80	3.50	4.10	20.0	24.0
MOX-API-1105-R30M	0.30	0.63	0.90	35.0	55.0
MOX-API-1105-R47M	0.47	0.88	1.20	30.0	50.0
MOX-API-1105-R60M	0.60	0.88	1.20	30.0	45.0
MOX-API-1105-R80M	0.80	1.30	1.60	28.0	40.0
MOX-API-1105-1R0M	1.00	1.40	1.80	25.0	35.0
MOX-API-1105-1R2M	1.20	1.40	1.80	25.0	32.0
MOX-API-1105-1R5M	1.50	2.50	2.80	23.0	30.0
MOX-API-1105-1R8M	1.80	2.80	3.30	20.0	26.0
MOX-API-1105-2R0M	2.00	3.50	4.00	18.0	25.0
MOX-API-1105-2R2M	2.20	4.20	4.80	17.0	24.0
MOX-API-1105-4R7M	4.70	8.80	9.60	12.0	20.0
MOX-API-1205-R30M	0.30	0.68	0.96	36.0	65.0
MOX-API-1205-R60M	0.60	0.90	1.20	30.0	55.0
MOX-API-1205-R80M	0.80	1.30	1.60	28.0	45.0
MOX-API-1205-1R0M	1.00	1.40	1.80	25.0	40.0
MOX-API-1205-1R5M	1.50	2.50	2.80	23.0	35.0
MOX-API-1205-2R0M	2.00	3.20	3.80	20.0	30.0



ENGINEERING NOTES

- Operating temperature: -55°C to 105°C.
- Temperature rise: approximately 40°C at I_{rms}.
- Inductance drop; approximately 30% max. at Isat
- MoxiE test equipment: HP4192A LF impedance analyzer or equivalent (test frequency: 1KHz/0.5V) RDC: CH502BC
- RoHS compliant
- Packaging: Bulk & tape/reel.
- MoxiE Inductor Corporation specifications are subject to change without notice.



ELECTRICAL SPECIFICATIONS

MoxiE Part Number	Inductance (μH)	DCR mΩ Max. (Typ.)	DCR mΩ Max. (Max.)	Isat (A Max.)	Irms (A Max.)
MOX-API-1305-R30M	0.30	0.45	0.60	38.0	70.0
MOX-API-1305-R47M	0.47	0.70	1.05	35.0	60.0
MOX-API-1305-R68M	0.68	1.00	1.25	30.0	55.0
MOX-API-1305-1R0M	1.00	1.20	1.60	27.0	45.0
MOX-API-1305-1R2M	1.20	1.30	1.80	26.0	42.0
MOX-API-1305-1R5M	1.50	1.88	2.40	25.0	40.0
MOX-API-1305-2R0M	2.00	2.20	2.70	23.0	35.0
MOX-API-1405-R30M	0.30	0.30	0.50	45.0	80.0
MOX-API-1405-R47M	0.47	0.35	0.60	42.0	75.0
MOX-API-1405-R68M	0.68	0.60	0.90	40.0	70.0
MOX-API-1405-1R0M	1.00	0.90	1.30	35.0	60.0
MOX-API-1405-1R6M	1.60	1.30	1.80	32.0	50.0
MOX-API-1405-2R0M	2.00	1.60	2.20	28.0	42.0
MOX-API-1605-R30M	0.30	0.27	0.42	50.0	100.0
MOX-API-1605-R47M	0.47	0.32	0.50	48.0	90.0
MOX-API-1605-R68M	0.68	0.55	0.80	45.0	80.0
MOX-API-1605-1R0M	1.00	0.80	1.20	42.0	70.0
MOX-API-1605-1R6M	1.60	1.20	1.60	38.0	60.0
MOX-API-1605-2R0M	2.00	1.50	1.90	28.0	50.0



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