

# 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**<sup>®</sup>  
INDUCTOR CORPORATION

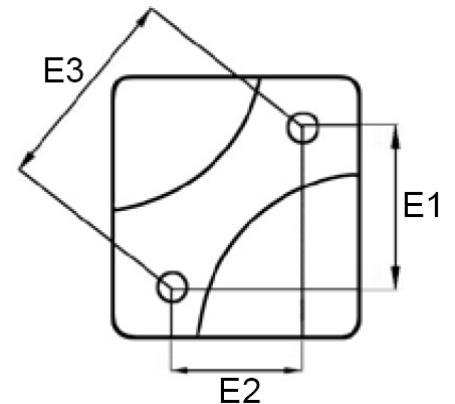
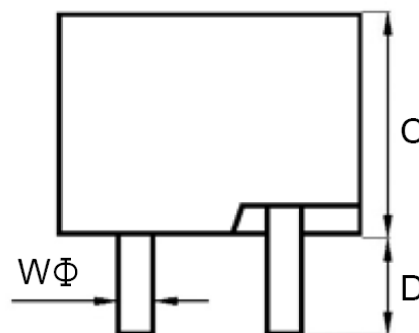
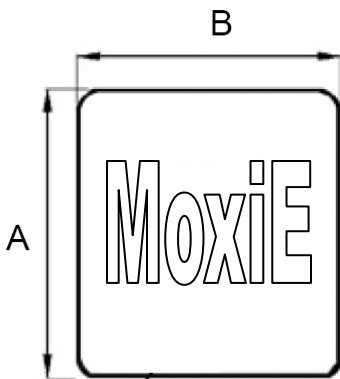


## AVAILABLE PACKAGE TYPES

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



## 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<sub>rms</sub>.
- 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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