

# MOX-FCB-SERIES

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

## Surface Mount Ferrite Chip Beads

MoxiE's MOX-FCB series of surface mount ferrite chip inductors are widely used in cable modems, notebooks, LCD televisions and digital cameras.

### Features:

- Available in 0402, 0603, 0805, 1206, 1210, 1806 & 1812 packages
- Closed circuit formed by internal silver printed layer.
- Operating temperature: -55°C to +125C.
- Excellent solderability & resistance to soldering heat.
- Nickel barrier termination makes the part suitable for wave or IR solder process.
- RoHS compliant.

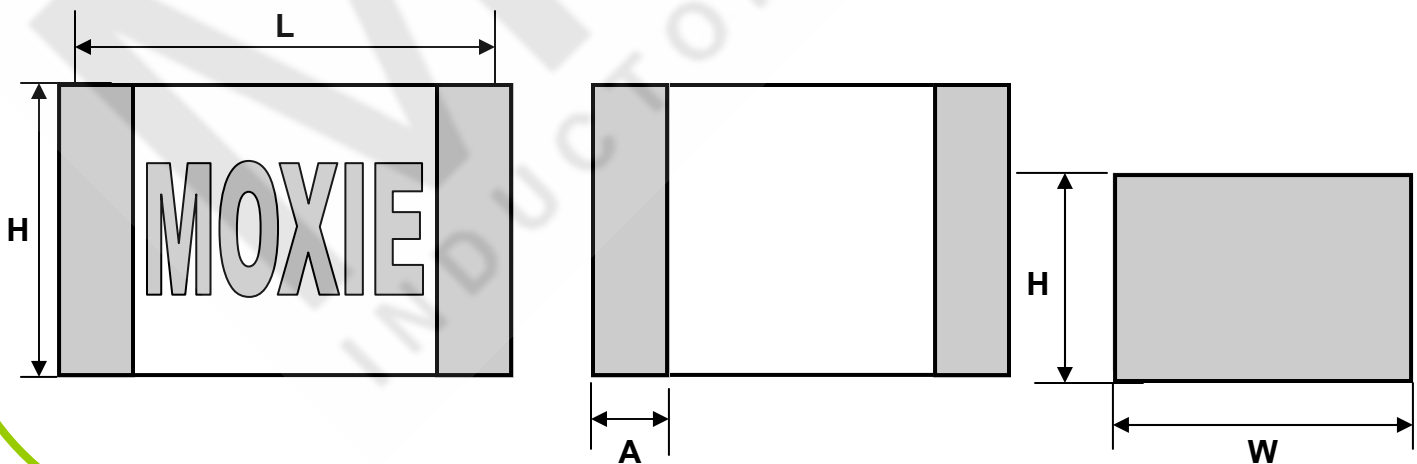


## PART NUMBERS

MOXIE PART NUMBER	L	W	H	A
MOX-FCB-0402	1.00 ± 0.15	0.50 ± 0.15	0.50 ± 0.15	0.25 ± 0.15
MOX-FCB-0603	1.60 ± 0.20	0.80 ± 0.15	0.85 ± 0.20	0.30 ± 0.10
MOX-FCB-0805	2.00 ± 0.20	1.25 ± 0.20	0.85 ± 0.20	0.50 ± 0.30
MOX-FCB-1206	3.20 ± 0.20	1.60 ± 0.20	1.60 ± 0.20	0.50 ± 0.30
MOX-FCB-1210	3.20 ± 0.20	2.50 ± 0.20	1.30 ± 0.20	0.50 ± 0.30
MOX-FCB-1806	4.50 ± 0.25	1.60 ± 0.20	1.60 ± 0.20	0.70 ± 0.30
MOX-FCB-1812	4.50 ± 0.25	3.20 ± 0.20	1.50 ± 0.20	0.70 ± 0.30



## MECHANICAL DIMENSIONS



# MOX-FCB-SERIES



## GENERAL SERIES

MoxiE Part Number	Impedance ( $\Omega$ )	Percent Tolerance	RDC Max.	IDC Current (mA)
MOX-FCB-0402-060S	6 @ 100 MHZ	S	0.05	500
MOX-FCB-0402-100S	10 @ 100 MHZ	S	0.05	500
MOX-FCB-0402-400S	40 @ 100 MHZ	S	0.30	300
MOX-FCB-0402-800S	80 @ 100 MHZ	S	0.40	200
MOX-FCB-0402-121S	120 @ 100 MHZ	S	0.50	200
MOX-FCB-0402-241S	240 @ 100 MHZ	S	0.50	200
MOX-FCB-0402-301S	300 @ 100 MHZ	S	0.80	200
MOX-FCB-0402-481S	480 @ 100 MHZ	S	0.80	100
MOX-FCB-0402-601S	600 @ 100 MHZ	S	1.00	100
MOX-FCB-0603-110S	11 @ 100 MHZ	S	0.05	500
MOX-FCB-0603-190S	19 @ 100 MHZ	S	0.08	500
MOX-FCB-0603-300S	30 @ 100 MHZ	S	0.10	400
MOX-FCB-0603-400S	40 @ 100 MHZ	S	0.10	400
MOX-FCB-0603-470S	47 @ 100 MHZ	S	0.20	200
MOX-FCB-0603-600S	60 @ 100 MHZ	S	0.10	300
MOX-FCB-0603-800S	80 @ 100 MHZ	S	0.15	300
MOX-FCB-0603-121S	120 @ 100 MHZ	S	0.25	300
MOX-FCB-0603-221S	220 @ 100 MHZ	S	0.30	200
MOX-FCB-0603-301S	300 @ 100 MHZ	S	0.40	200
MOX-FCB-0603-451S	450 @ 100 MHZ	S	0.50	200
MOX-FCB-0603-601S	600 @ 100 MHZ	S	0.50	200
MOX-FCB-0603-751S	750 @ 100 MHZ	S	0.70	200
MOX-FCB-0603-102S	1000 @ 100 MHZ	S	0.70	200
MOX-FCB-0603-152S	1500 @ 100 MHZ	S	1.00	50
MOX-FCB-0603-222S	2200 @ 100 MHZ	S	1.20	50
MOX-FCB-0805-070S	7 @ 100 MHZ	S	0.10	600
MOX-FCB-0805-090S	9 @ 100 MHZ	S	0.10	600
MOX-FCB-0805-110S	11 @ 100 MHZ	S	0.10	600
MOX-FCB-0805-170S	17 @ 100 MHZ	S	0.10	600
MOX-FCB-0805-320S	32 @ 100 MHZ	S	0.10	600
MOX-FCB-0805-600S	60 @ 100 MHZ	S	0.15	500
MOX-FCB-0805-700S	70 @ 100 MHZ	S	0.15	500
MOX-FCB-0805-800S	80 @ 100 MHZ	S	0.15	500
MOX-FCB-0805-121S	120 @ 100 MHZ	S	0.25	200
MOX-FCB-0805-151S	150 @ 100 MHZ	S	0.25	300
MOX-FCB-0805-221S	220 @ 100 MHZ	S	0.30	300
MOX-FCB-0805-301S	300 @ 100 MHZ	S	0.30	300
MOX-FCB-0805-401S	400 @ 100 MHZ	S	0.30	300
MOX-FCB-0805-501S	500 @ 100 MHZ	S	0.40	300
MOX-FCB-0805-601S	600 @ 100 MHZ	S	0.40	300
MOX-FCB-0805-751S	750 @ 100 MHZ	S	0.50	200
MOX-FCB-0805-102S	1000 @ 100 MHZ	S	0.50	200
MOX-FCB-0805-152S	1500 @ 100 MHZ	S	0.60	200
MOX-FCB-0805-202S	2000 @ 100 MHZ	S	0.80	100
MOX-FCB-0805-222S	2200 @ 100 MHZ	S	1.00	100
MOX-FCB-0805-272S	2700 @ 100 MHZ	S	1.00	100

# MOX-FCB-SERIES



## GENERAL SERIES

MoxiE Part Number	Impedance ( $\Omega$ )	Percent Tolerance	RDC Max.	IDC Current (mA)
MOX-FCB-1206-190S	19 @ 100 MHZ	S	0.05	600
MOX-FCB-1206-260S	26 @ 100 MHZ	S	0.05	600
MOX-FCB-1206-320S	32 @ 100 MHZ	S	0.05	600
MOX-FCB-1206-500S	50 @ 100 MHZ	S	0.10	500
MOX-FCB-1206-600S	60 @ 100 MHZ	S	0.10	500
MOX-FCB-1206-700S	70 @ 100 MHZ	S	0.10	500
MOX-FCB-1206-900S	90 @ 100 MHZ	S	0.15	500
MOX-FCB-1206-121S	120 @ 100 MHZ	S	0.15	500
MOX-FCB-1206-151S	150 @ 100 MHZ	S	0.15	500
MOX-FCB-1206-201S	200 @ 100 MHZ	S	0.20	400
MOX-FCB-1206-401S	400 @ 100 MHZ	S	0.20	400
MOX-FCB-1206-501S	500 @ 100 MHZ	S	0.20	400
MOX-FCB-1206-601S	600 @ 100 MHZ	S	0.30	400
MOX-FCB-1206-102S	1000 @ 50 MHZ	S	0.40	200
MOX-FCB-1206-122S	1200 @ 50 MHZ	S	0.40	200
MOX-FCB-1206-152S	1500 @ 50 MHZ	S	0.45	200
MOX-FCB-1206-202S	2000 @ 30 MHZ	S	0.60	200
MOX-FCB-1210-320S	32 @ 50 MHZ	S	0.20	500
MOX-FCB-1210-601S	60 @ 50 MHZ	S	0.20	500
MOX-FCB-1210-901S	90 @ 50 MHZ	S	0.20	500
MOX-FCB-1806-500S	50 @ 100 MHZ	S	0.20	600
MOX-FCB-1806-600S	60 @ 100 MHZ	S	0.20	600
MOX-FCB-1806-800S	80 @ 100 MHZ	S	0.20	600
MOX-FCB-1806-101S	100 @ 100 MHZ	S	0.30	500
MOX-FCB-1806-151S	150 @ 100 MHZ	S	0.30	500
MOX-FCB-1806-171S	170 @ 100 MHZ	S	0.30	500
MOX-FCB-1806-102S	1000 @ 100 MHZ	S	1.00	200
MOX-FCB-1812-700S	70 @ 100 MHZ	S	0.30	500
MOX-FCB-1812-121S	120 @ 100 MHZ	S	0.30	500

# MOX-FCB-SERIES



## HIGH CURRENT SERIES

MoxiE Part Number	Impedance ( $\Omega$ )	Percent Tolerance	RDC Max.	IDC Current (mA)
MOX-FCB-0603P-110S	11 @ 100 MHz	S	0.02	4000
MOX-FCB-0603P-250S	25 @ 100 MHz	S	0.03	3000
MOX-FCB-0603P-300S	30 @ 100 MHz	S	0.04	3000
MOX-FCB-0603P-400S	40 @ 100 MHz	S	0.04	3000
MOX-FCB-0603P-600S	60 @ 100 MHz	S	0.04	3000
MOX-FCB-0603P-800S	80 @ 100 MHz	S	0.05	2500
MOX-FCB-0603P-121S	120 @ 100 MHz	S	0.05	2500
MOX-FCB-0603P-221S	220 @ 100 MHz	S	0.10	2000
MOX-FCB-0603P-331S	300 @ 100 MHz	S	0.10	2000
MOX-FCB-0603P-501S	500 @ 100 MHz	S	0.15	1500
MOX-FCB-0603P-601S	600 @ 100 MHz	S	0.20	1000
MOX-FCB-0603P-102S	1000 @ 100 MHz	S	0.25	800
MOX-FCB-0805P-110S	11 @ 100 MHz	S	0.01	6000
MOX-FCB-0805P-170S	17 @ 100 MHz	S	0.02	5000
MOX-FCB-0805P-300S	30 @ 100 MHz	S	0.02	4000
MOX-FCB-0805P-500S	50 @ 100 MHz	S	0.03	3000
MOX-FCB-0805P-600S	60 @ 100 MHz	S	0.03	3000
MOX-FCB-0805P-800S	80 @ 100 MHz	S	0.04	3000
MOX-FCB-0805P-121S	120 @ 100 MHz	S	0.04	3000
MOX-FCB-0805P-181S	180 @ 100 MHz	S	0.20	1000
MOX-FCB-0805P-201S	200 @ 100 MHz	S	0.05	2500
MOX-FCB-0805P-221S	220 @ 100 MHz	S	0.08	2200
MOX-FCB-0805P-301S	300 @ 100 MHz	S	0.08	2000
MOX-FCB-0805P-331S	330 @ 100 MHz	S	0.08	2000
MOX-FCB-0805P-601S	600 @ 100 MHz	S	0.10	2000
MOX-FCB-0805P-102S	1000 @ 100 MHz	S	0.12	1500
MOX-FCB-1206P-190S	19 @ 100 MHz	S	0.02	6000
MOX-FCB-1206P-320S	32 @ 100 MHz	S	0.02	4000
MOX-FCB-1206P-600S	60 @ 100 MHz	S	0.02	4000
MOX-FCB-1206P-800S	80 @ 100 MHz	S	0.03	3000
MOX-FCB-1206P-101S	100 @ 100 MHz	S	0.03	2500
MOX-FCB-1206P-301S	300 @ 100 MHz	S	0.06	2000
MOX-FCB-1206P-601S	600 @ 100 MHz	S	0.10	1800
MOX-FCB-1206P-102S	1000 @ 50 MHz	S	0.15	1200
MOX-FCB-1206P-122S	1200 @ 50 MHz	S	0.18	1000
MOX-FCB-1206P-152S	1500 @ 50 MHz	S	0.20	800
MOX-FCB-1206P-600S	60 @ 100 MHz	S	0.03	4000
MOX-FCB-1206P-900S	90 @ 100 MHz	S	0.03	3000
MOX-FCB-1210P-600S	60 @ 100 MHz	S	0.03	4200
MOX-FCB-1210P-900S	90 @ 100 MHz	S	0.03	3500
MOX-FCB-1806-P500S	50 @ 100 MHz	S	0.02	6000
MOX-FCB-1806-P600S	60 @ 100 MHz	S	0.02	5000
MOX-FCB-1806-P800S	80 @ 100 MHz	S	0.03	4000
MOX-FCB-1806-P151S	150 @ 100 MHz	S	0.10	2000
MOX-FCB-1812P-700S	70 @ 100 MHz	S	0.03	6000
MOX-FCB-1812P-121S	120 @ 100 MHz	S	0.03	4000

# MOX-FCB-SERIES

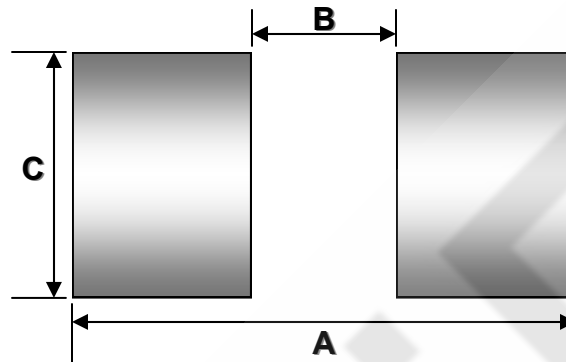


## HIGH SPEED SERIES

MoxiE Part Number	Impedance ( $\Omega$ )	Percent Tolerance	RDC Max.	IDC Current (mA)
MOX-FCB-0402N-060S	6 @ 100 MHZ	S	0.10	300
MOX-FCB-0402N-100S	10 @ 100 MHZ	S	0.20	200
MOX-FCB-0402N-400S	40 @ 100 MHZ	S	0.40	150
MOX-FCB-0402N-800S	80 @ 100 MHZ	S	0.60	100
MOX-FCB-0402N-121S	120 @ 100 MHZ	S	0.80	50
MOX-FCB-0603N-060S	6 @ 100 MHZ	S	0.05	500
MOX-FCB-0603N-100S	10 @ 100 MHZ	S	0.07	400
MOX-FCB-0603N-400S	40 @ 100 MHZ	S	0.30	300
MOX-FCB-0603N-600S	60 @ 100 MHZ	S	0.30	300
MOX-FCB-0603N-750S	75 @ 100 MHZ	S	0.40	300
MOX-FCB-0603N-800S	80 @ 100 MHZ	S	0.40	300
MOX-FCB-0603N-121S	120 @ 100 MHZ	S	0.40	300
MOX-FCB-0603N-241S	240 @ 100 MHZ	S	0.40	200
MOX-FCB-0603N-301S	300 @ 100 MHZ	S	0.50	200
MOX-FCB-0603N-481S	480 @ 100 MHZ	S	0.60	150
MOX-FCB-0603N-601S	600 @ 100 MHZ	S	0.60	100
MOX-FCB-0603N-102S	1000 @ 100 MHZ	S	0.70	100
MOX-FCB-0805N-060S	6 @ 100 MHZ	S	0.07	800
MOX-FCB-0805N-110S	11 @ 100 MHZ	S	0.10	700
MOX-FCB-0805N-260S	26 @ 100 MHZ	S	0.20	600
MOX-FCB-0805N-320S	32 @ 100 MHZ	S	0.20	600
MOX-FCB-0805N-600S	60 @ 100 MHZ	S	0.30	500
MOX-FCB-0805N-750S	75 @ 100 MHZ	S	0.30	500
MOX-FCB-0805N-900S	90 @ 100 MHZ	S	0.30	500
MOX-FCB-0805N-121S	120 @ 100 MHZ	S	0.40	400
MOX-FCB-0805N-151S	150 @ 100 MHZ	S	0.40	400
MOX-FCB-0805N-171S	170 @ 100 MHZ	S	0.50	400
MOX-FCB-0805N-221S	220 @ 100 MHZ	S	0.50	300
MOX-FCB-0805N-301S	300 @ 100 MHZ	S	0.50	300
MOX-FCB-0805N-401S	400 @ 100 MHZ	S	0.50	300
MOX-FCB-0805N-501S	500 @ 100 MHZ	S	0.50	200
MOX-FCB-0805N-601S	600 @ 100 MHZ	S	0.50	200
MOX-FCB-0805N-102S	1000 @ 100 MHZ	S	0.60	100
MOX-FCB-0805N-122S	1200 @ 100 MHZ	S	0.70	100
MOX-FCB-0805N-152S	1500 @ 100 MHZ	S	0.70	100
MOX-FCB-0805N-222S	2200 @ 100 MHZ	S	0.75	100
MOX-FCB-1206N-320S	32 @ 100 MHZ	S	0.20	600
MOX-FCB-1206N-600S	60 @ 100 MHZ	S	0.30	500
MOX-FCB-1206N-800S	80 @ 100 MHZ	S	0.30	500
MOX-FCB-1206N-900S	90 @ 100 MHZ	S	0.30	500
MOX-FCB-1206N-121S	120 @ 100 MHZ	S	0.40	400
MOX-FCB-1206N-151S	150 @ 100 MHZ	S	0.40	400
MOX-FCB-1206N-201S	200 @ 100 MHZ	S	0.50	300
MOX-FCB-1206N-221S	220 @ 100 MHZ	S	0.50	300
MOX-FCB-1206N-351S	350 @ 100 MHZ	S	0.60	300
MOX-FCB-1206N-401S	400 @ 100 MHZ	S	0.60	300
MOX-FCB-1206N-601S	600 @ 100 MHZ	S	0.70	300
MOX-FCB-1206N-122S	1200 @ 100 MHZ	S	1.00	200
MOX-FCB-1206N-152S	1500 @ 100 MHZ	S	1.20	150



## LANDING PATTERN



MOXIE PART NUMBER	A	B	C
MOX-FCB-0402	1.60	0.40	0.50
MOX-FCB-0603	2.10	1.00	0.80
MOX-FCB-0805	2.60	1.20	1.20
MOX-FCB-1206	4.30	2.00	1.60
MOX-FCB-1806	6.00	3.10	1.60
MOX-FCB-1812	6.00	3.30	3.20



## TEST DATA

### Impedance:

HP-4286A LCR meter.  
HP-16192A test fixture.

### Direct Current Resistance:

HP-4338B milliohmeter.  
HP-16192A test fixture.

### Termination Finish:

100% tin.

### Inductance Value:

S =  $\pm 25\%$  M =  $\pm 20\%$

### Material Type:

P = High current capability

N = Narrow band, having sharp impedance characteristics.

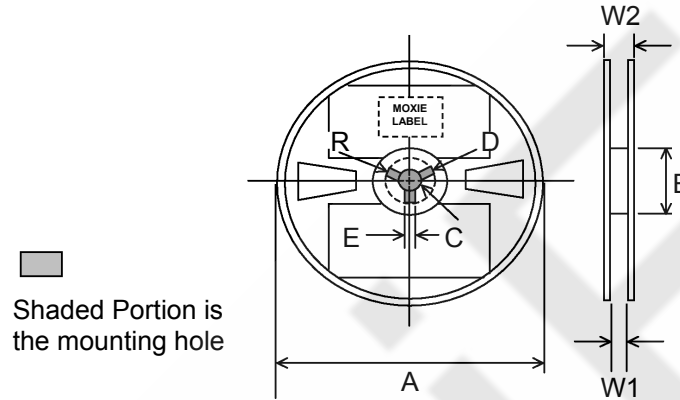
### MoxiE Note:

Components should be adequately preheated before soldering.

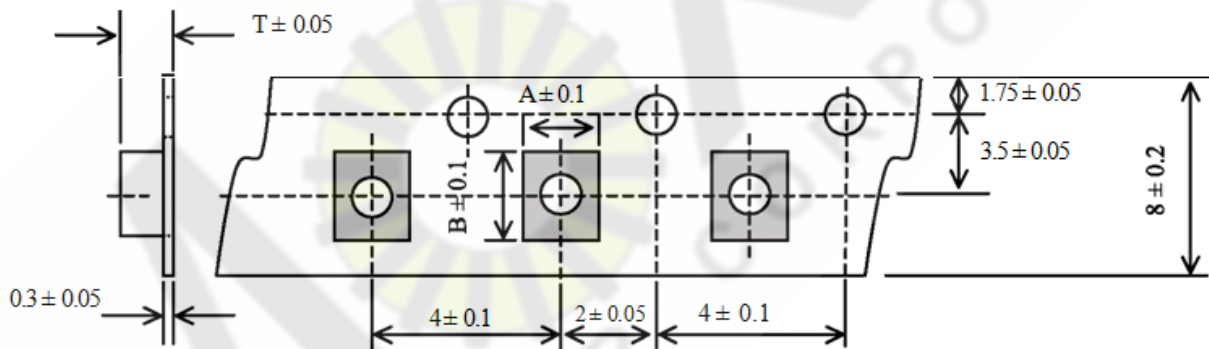
MoxiE Inductor Corporation specifications are subject to change without notice.



## PACKAGING



MoxiE Specification	A	B	C	D	E	W 1	W2	R
Dimension (mm)	178 ± 2.0	60 ± 2.0	13 ± 0.5	21 ± 0.8	2.0 ± 0.5	9.0 ± 0.3	13 ± 1.4	1.0



MoxiE Part Number	A	B	T	Quantity Per Reel
MOX-FCB-0402	1.10	1.90	1.10	10,000
MOX-FCB-0603	1.10	1.90	1.10	4,000
MOX-FCB-0805	1.55	2.30	1.20	4,000
MOX-FCB-1206	1.90	3.50	1.40	3,000
MOX-FCB-1806	2.90	4.90	1.40	2,000
MOX-FCB-1812	3.60	4.90	2.05	1,000