

# MOX-MXCS SERIES



## RF Surface Mount Wire Wound Ceramic Chip Inductors

MoxiE's MOX-MXCS series of surface mount wire wound chip inductors are designed with a ceramic body and wire wound construction to provide the highest possible SRFs as well as industry leading Q values.

### Features:

- Engineered for RF signal applications.
- Non-magnetic coil form also assures high thermal stability.
- Excellent Q factor even at high frequencies.
- MoxiE Inductor Corporation custom designs available.
- Packaging: **0402** (2000/Reel) **0603** (4000/Reel) **0805** (2500/Reel) **1008** (2000/Reel)

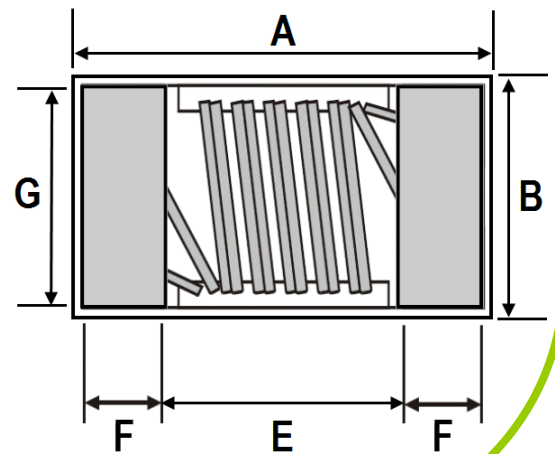
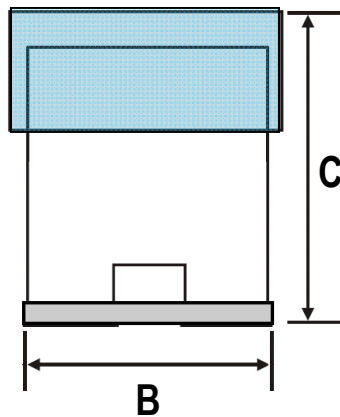
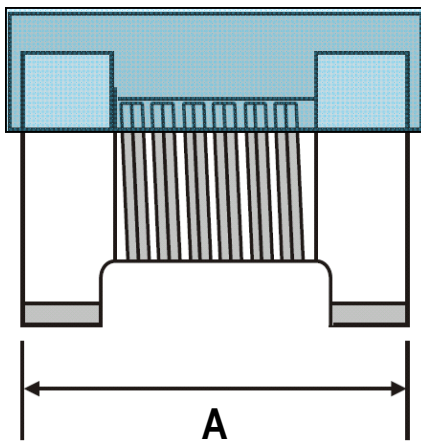


## PART NUMBERS

MOXIE PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D (REF)	E	F	G (TERMINAL)	H	I	J
MOX-MXCS-0402	1.19	0.64	0.66	0.25	0.56	0.23	0.51	0.66	0.36	0.46
MOX-MXCS-0603	1.80	1.12	1.02	0.38	0.86	0.33	0.76	1.02	0.64	0.64
MOX-MXCS-0805	2.29	1.73	1.52	0.50	1.02	0.51	1.27	1.78	1.02	0.76
MOX-MXCS-1008	2.92	2.79	2.10	0.51	1.52	0.51	2.03	2.54	1.02	1.27



## MECHANICAL DIMENSIONS



# MOX-MXCS SERIES

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



## MOX-MXCS-0402 SPECIFICATIONS

MoxiE Part Number	Inductance (nH)	Tolerance (±%)	Q Min	900MHz		1.7GHz		SRF (GHz) Min	Rdc (Ω) Max	IRMS (mA) Max.
				L Typ.	Q Typ.	L Typ.	Q Typ.			
MOX-MXCS-0402CS-1N0□	1.0	10 / 5	16	1.02	77	1.02	69	12.70	0.045	1360
MOX-MXCS-0402CS-1N9□	1.9	10 / 5	16	1.72	68	1.74	82	11.30	0.070	1040
MOX-MXCS-0402CS-2N0□	2.0	10 / 5	16	1.93	54	1.93	75	11.10	0.070	1040
MOX-MXCS-0402CS-2N2□	2.2	10 / 5	19	2.19	59	2.23	100	10.80	0.070	960
MOX-MXCS-0402CS-2N4□	2.4	10 / 5	15	2.24	51	2.27	68	10.50	0.068	790
MOX-MXCS-0402CS-2N7□	2.7	10 / 5	16	2.58	42	2.60	61	10.40	0.120	640
MOX-MXCS-0402CS-3N3□	3.3	10 / 5	19	3.10	65	3.12	87	7.00	0.066	840
MOX-MXCS-0402CS-3N6□	3.6	10 / 5	19	3.56	45	3.62	71	6.80	0.066	840
MOX-MXCS-0402CS-3N9□	3.9	10 / 5	19	3.89	50	4.00	75	6.00	0.066	840
MOX-MXCS-0402CS-4N3□	4.3	10 / 5	18	4.19	47	4.30	71	6.00	0.091	700
MOX-MXCS-0402CS-4N7□	4.7	10 / 5	15	4.55	48	4.68	68	4.77	0.130	640
MOX-MXCS-0402CS-5N1□	5.1	10 / 5	20	5.15	56	5.25	82	4.80	0.083	800
MOX-MXCS-0402CS-5N6□	5.6	10 / 5	20	5.16	54	5.28	81	4.80	0.083	760
MOX-MXCS-0402CS-6N2□	6.2	10 / 5	20	6.16	52	6.37	76	4.80	0.083	760
MOX-MXCS-0402CS-6N8□	6.8	10 / 5	20	6.56	63	6.93	78	4.80	0.083	680
MOX-MXCS-0402CS-7N5□	7.5	10 / 5	22	7.91	60	8.22	88	4.80	0.10	680
MOX-MXCS-0402CS-8N2□	8.2	10 / 5	22	8.50	57	8.85	84	4.40	0.10	680
MOX-MXCS-0402CS-8N7□	8.7	10 / 5	18	8.78	54	9.21	73	4.10	0.20	480
MOX-MXCS-0402CS-9N0□	9.0	10 / 5	22	9.07	62	9.53	78	4.16	0.10	680
MOX-MXCS-0402CS-9N5□	9.5	10 / 5	18	9.42	54	9.98	69	4.00	0.20	480
MOX-MXCS-0402CS-10N□	10.0	10 / 5	21	9.8	50	10.10	67	3.90	0.20	480
MOX-MXCS-0402CS-11N□	11.0	10 / 5	24	10.7	52	11.20	78	3.68	0.12	640
MOX-MXCS-0402CS-12N□	12.0	10 / 5	24	11.9	53	12.70	71	3.60	0.12	640
MOX-MXCS-0402CS-13N□	13.0	10 / 5	24	13.4	51	14.63	57	3.45	0.21	440
MOX-MXCS-0402CS-15N□	15.0	10 / 5	24	14.6	55	15.50	77	3.28	0.17	560
MOX-MXCS-0402CS-16N□	16.0	10 / 5	24	16.6	46	18.86	47	3.10	0.22	560
MOX-MXCS-0402CS-18N□	18.0	10 / 5	25	18.3	57	20.28	62	3.10	0.23	420
MOX-MXCS-0402CS-19N□	19.0	10 / 5	24	19.1	50	21.10	67	3.04	0.20	480
MOX-MXCS-0402CS-20N□	20.0	10 / 5	25	20.7	52	23.66	53	3.00	0.25	420
MOX-MXCS-0402CS-22N□	22.0	10 / 5	25	23.2	53	26.75	53	2.80	0.30	400
MOX-MXCS-0402CS-23N□	23.0	10 / 5	22	23.8	49	26.90	64	2.72	0.30	400
MOX-MXCS-0402CS-24N□	24.0	10 / 5	25	25.1	51	29.50	50	2.70	0.30	400
MOX-MXCS-0402CS-27N□	27.0	10 / 5	24	28.7	49	33.50	63	2.48	0.30	400
MOX-MXCS-0402CS-30N□	30.0	10 / 5	25	31.1	46	38.50	39	2.35	0.35	400
MOX-MXCS-0402CS-33N□	33.0	10 / 5	24	34.9	31	41.74	32	2.35	0.40	400
MOX-MXCS-0402CS-36N□	36.0	10 / 5	24	39.5	44	48.40	53	2.32	0.44	320
MOX-MXCS-0402CS-39N□	39.0	10 / 5	25	41.7	47	50.23	45	2.10	0.55	200
MOX-MXCS-0402CS-40N□	40.0	10 / 5	24	39.0	44	47.40	33	2.24	0.44	320
MOX-MXCS-0402CS-43N□	43.0	10 / 5	25	45.8	46	61.55	34	2.03	0.81	100
MOX-MXCS-0402CS-47N□	47.0	10 / 5	20	50.0	38	-	-	2.10	0.83	150
MOX-MXCS-0402CS-51N□	51.0	10 / 5	25	56.6	40	-	-	1.75	0.82	100
MOX-MXCS-0402CS-56N□	56.0	10 / 5	22	62.8	42	-	-	1.76	0.97	100
MOX-MXCS-0402CS-68N□	68.0	10 / 5	22	78.2	36	-	-	1.62	1.12	100
MOX-MXCS-0402CS-82N□	82.0	10 / 5	20	-	-	-	-	1.26	1.55	50
MOX-MXCS-0402CS-R10□	100.0	10 / 5	20	-	-	-	-	1.16	2.00	30

# MOX-MXCS SERIES

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



## MOX-MXCS-0603 SPECIFICATIONS

MOXIE Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min.	SRF (MHz) Min.	RDC (Ω) Max.	IRMS (mA) Max.	900 MHz L Typ. Q Typ.		1.7 GHz L Typ. Q Typ.		Color
MOX-MXCS-0603-1N6□	1.6	250	10 / 5	24	12500	0.030	700	1.67	49	1.65	63	Red
MOX-MXCS-0603-1N8□	1.8	250	10 / 5	16	12500	0.045	700	1.63	35	1.66	50	Black
MOX-MXCS-0603-3N6□	3.6	250	10 / 5	22	5900	0.063	700	3.72	53	3.71	65	Red
MOX-MXCS-0603-3N9□	3.9	250	10 / 5	22	6900	0.080	700	3.95	49	3.96	67	Brown
MOX-MXCS-0603-4N3□	4.3	250	10 / 5	22	5900	0.063	700	4.32	50	4.33	70	Orange
MOX-MXCS-0603-4N7□	4.7	250	10 / 5	20	5800	0.116	700	4.72	47	4.75	57	Violet
MOX-MXCS-0603-5N1□	5.1	250	10 / 5	20	5700	0.140	700	4.93	47	4.95	56	Green
MOX-MXCS-0603-5N6□	5.6	250	10 / 5	20	5800	0.170	700	5.53	56	5.86	77	Yellow
MOX-MXCS-0603-6N3□	6.3	250	10 / 5	20	5700	0.140	700	5.50	47	6.10	60	White
MOX-MXCS-0603-6N8□	6.8	250	10 / 5	27	5800	0.110	700	6.75	60	7.10	81	Red
MOX-MXCS-0603-7N5□	7.5	250	10 / 5	28	4800	0.106	700	7.70	60	7.82	65	Brown
MOX-MXCS-0603-8N2□	8.2	250	10 / 5	28	4700	0.109	700	8.30	60	8.50	60	White
MOX-MXCS-0603-8N7□	8.7	250	10 / 5	28	4600	0.109	700	8.86	62	9.32	58	Yellow
MOX-MXCS-0603-9N5□	9.5	250	10 / 5	28	5400	0.135	700	9.70	59	9.92	61	Blue
MOX-MXCS-0603-10N□	10	250	10 / 5 / 2	31	4800	0.130	700	10.0	66	10.6	83	Orange
MOX-MXCS-0603-11N□	11	250	10 / 5 / 2	33	4000	0.086	700	11.0	53	11.5	56	Gray
MOX-MXCS-0603-12N□	12	250	10 / 5 / 2	35	4000	0.130	700	12.3	72	13.5	83	Yellow
MOX-MXCS-0603-15N□	15	250	10 / 5 / 2	35	4000	0.170	700	15.4	64	16.8	89	Green
MOX-MXCS-0603-16N□	16	250	10 / 5 / 2	34	3300	0.104	700	16.2	55	17.3	52	White
MOX-MXCS-0603-18N□	18	250	10 / 5 / 2	35	3100	0.170	700	18.7	70	21.4	69	Blue
MOX-MXCS-0603-22N□	22	250	10 / 5 / 2	38	3000	0.190	700	22.8	73	26.1	71	Violet
MOX-MXCS-0603-24N□	24	250	10 / 5 / 2	37	2650	0.135	700	24.5	45	28.7	39	Black
MOX-MXCS-0603-27N□	27	250	10 / 5 / 2	40	2800	0.220	600	29.2	74	34.6	65	Gray
MOX-MXCS-0603-30N□	30	250	10 / 5 / 2	37	2250	0.144	600	31.4	47	39.9	28	Brown
MOX-MXCS-0603-33N□	33	250	10 / 5 / 2	40	2300	0.220	600	36	67	49.5	42	White
MOX-MXCS-0603-36N□	36	250	10 / 5 / 2	38	2080	0.250	600	39.4	47	52.7	24	Red
MOX-MXCS-0603-39N□	39	250	10 / 5 / 2	40	2200	0.250	600	42.7	60	60.2	40	Black
MOX-MXCS-0603-43N□	43	250	10 / 5 / 2	39	2000	0.280	600	47	44	64.9	21	Orange
MOX-MXCS-0603-47N□	47	200	10 / 5 / 2	38	2000	0.280	600	52.2	62	77.2	35	Brown
MOX-MXCS-0603-56N□	56	200	10 / 5 / 2	38	1900	0.310	600	62.5	56	97	26	Red
MOX-MXCS-0603-68N□	68	200	10 / 5 / 2	37	1700	0.340	600	80.5	54	168	21	Orange
MOX-MXCS-0603-72N□	72	150	10 / 5 / 2	34	1700	0.490	400	82	53	135	20	Yellow
MOX-MXCS-0603-82N□	82	150	10 / 5 / 2	34	1700	0.540	400	96.2	54	177	21	Green
MOX-MXCS-0603-R10□	100	150	10 / 5 / 2	34	1400	0.580	400	124	49	-	-	Blue
MOX-MXCS-0603-R11□	110	150	10 / 5 / 2	32	1350	0.610	300	138	43	-	-	Violet
MOX-MXCS-0603-R12□	120	150	10 / 5 / 2	32	1300	0.750	300	166	39	-	-	Gray
MOX-MXCS-0603-R15□	150	150	10 / 5 / 2	28	990	0.920	280	250	25	-	-	White
MOX-MXCS-0603-R18□	180	100	10 / 5 / 2	25	990	1.250	240	305	22	-	-	Black
MOX-MXCS-0603-R22□	220	100	10 / 5 / 2	25	900	2.100	200	-	-	-	-	Brown
MOX-MXCS-0603-R27□	270	100	10 / 5 / 2	24	900	2.800	170	-	-	-	-	Red
MOX-MXCS-0603-R33□	330	100	10 / 5 / 2	25	900	3.890	100	-	-	-	-	Orange
MOX-MXCS-0603-R39□	390	100	10 / 5 / 2	25	700	4.350	100	-	-	-	-	Yellow

# MOX-MXCS SERIES



## MOX-MXCS-0805 SPECIFICATIONS

MoxiE Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	IRMS (mA) Max.	Color
MOX-MXCS-0805-2N8□	2.8	250	10 / 5	80	1500	7900	0.06	800	Gray
MOX-MXCS-0805-3N0□	3.0	250	10 / 5	65	1500	7900	0.06	800	White
MOX-MXCS-0805-3N3□	3.3	250	10 / 5	50	1500	7900	0.08	600	Black
MOX-MXCS-0805-5N6□	5.6	250	10 / 5	65	1000	5500	0.08	600	Orange
MOX-MXCS-0805-6N8□	6.8	250	10 / 5	50	1000	5500	0.11	600	Brown
MOX-MXCS-0805-7N5□	7.5	250	10 / 5	50	1000	4500	0.14	600	Green
MOX-MXCS-0805-8N2□	8.2	250	10 / 5	50	1000	4700	0.12	600	Red
MOX-MXCS-0805-10N□	10	250	10 / 5 / 2	60	500	4200	0.10	600	Blue
MOX-MXCS-0805-12N□	12	250	10 / 5 / 2	50	500	4000	0.15	600	Orange
MOX-MXCS-0805-15N□	15	250	10 / 5 / 2	50	500	3400	0.17	600	Yellow
MOX-MXCS-0805-18N□	18	250	10 / 5 / 2	50	500	3300	0.20	600	Green
MOX-MXCS-0805-22N□	22	250	10 / 5 / 2	55	500	2600	0.22	500	Blue
MOX-MXCS-0805-24N□	24	250	10 / 5 / 2	50	500	2000	0.22	500	Gray
MOX-MXCS-0805-27N□	27	250	10 / 5 / 2	55	500	2500	0.25	500	Violet
MOX-MXCS-0805-33N□	33	250	10 / 5 / 2	60	500	2050	0.27	500	Gray
MOX-MXCS-0805-36N□	36	250	10 / 5 / 2	55	500	1700	0.27	500	Orange
MOX-MXCS-0805-39N□	39	250	10 / 5 / 2	60	500	2000	0.29	500	White
MOX-MXCS-0805-43N□	43	200	10 / 5 / 2	60	500	1650	0.34	500	Yellow
MOX-MXCS-0805-47N□	47	200	10 / 5 / 2	60	500	1650	0.31	500	Black
MOX-MXCS-0805-56N□	56	200	10 / 5 / 2	60	500	1550	0.34	500	Brown
MOX-MXCS-0805-68N□	68	200	10 / 5 / 2	60	500	1450	0.38	500	Red
MOX-MXCS-0805-82N□	82	150	10 / 5 / 2	65	500	1300	0.42	400	Orange
MOX-MXCS-0805-91N□	91	150	10 / 5 / 2	65	500	1200	0.48	400	Black
MOX-MXCS-0805-R10□	100	150	10 / 5 / 2	65	500	1200	0.46	400	Yellow
MOX-MXCS-0805-R11□	110	150	10 / 5 / 2	50	250	1000	0.48	400	Brown
MOX-MXCS-0805-R12□	120	150	10 / 5 / 2	50	250	1100	0.51	400	Green
MOX-MXCS-0805-R15□	150	100	10 / 5 / 2	50	250	920	0.56	400	Blue
MOX-MXCS-0805-R18□	180	100	10 / 5 / 2	50	250	870	0.64	400	Violet
MOX-MXCS-0805-R20□	200	100	10 / 5 / 2	50	250	860	0.68	400	Red
MOX-MXCS-0805-R22□	220	100	10 / 5 / 2	50	250	850	0.70	400	Gray
MOX-MXCS-0805-R24□	240	100	10 / 5 / 2	44	250	690	1.00	350	Red
MOX-MXCS-0805-R25□	250	100	10 / 5 / 2	45	250	660	1.20	350	Yellow
MOX-MXCS-0805-R27□	270	100	10 / 5 / 2	48	250	650	1.00	350	White
MOX-MXCS-0805-R33□	330	100	10 / 5 / 2	48	250	600	1.40	310	Black
MOX-MXCS-0805-R39□	390	100	10 / 5 / 2	48	250	560	1.50	290	Brown
MOX-MXCS-0805-R47□	470	50	10 / 5 / 2	33	100	375	1.76	250	Violet
MOX-MXCS-0805-R56□	560	25	10 / 5 / 2	23	50	340	1.90	230	Orange
MOX-MXCS-0805-R62□	620	25	10 / 5 / 2	23	50	220	2.20	210	Yellow
MOX-MXCS-0805-R68□	680	25	10 / 5 / 2	23	50	188	2.20	190	Green
MOX-MXCS-0805-R82□	820	25	10 / 5 / 2	23	50	215	2.35	180	Blue
MOX-MXCS-0805-1R0□	1000	25	10 / 5 / 2	20	50	100	2.50	170	Gray

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INDUCTOR CORPORATION

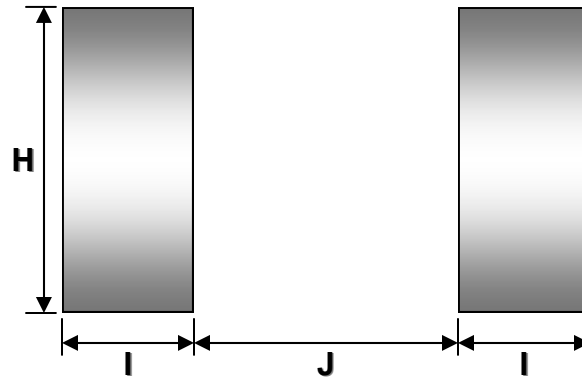


## MOX-MXCS-1008 SPECIFICATIONS

MoxiE Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (MHz) Min.	RDC (Ω) Max.	IRMS (mA)Max.	Color Coding		
									First	Second	Third
MOX-MXCS-1008-10N□	10	50	10/5/2	50	500	4100	0.08	1000	Brown	Black	Black
MOX-MXCS-1008-12N□	12	50	10/5/2	50	500	3300	0.09	1000	Brown	Red	Black
MOX-MXCS-1008-15N□	15	50	10/5/2	50	500	2500	0.10	1000	Brown	Green	Black
MOX-MXCS-1008-18N□	18	50	10/5/2	50	350	2500	0.11	1000	Brown	Gray	Black
MOX-MXCS-1008-22N□	22	50	10/5/2	55	350	2400	0.12	1000	Red	Red	Black
MOX-MXCS-1008-27N□	27	50	10/5/2	55	350	1600	0.13	1000	Red	Violet	Black
MOX-MXCS-1008-33N□	33	50	10/5/2	60	350	1600	0.14	1000	Orange	Orange	Black
MOX-MXCS-1008-39N□	39	50	10/5/2	60	350	1500	0.15	1000	Orange	White	Black
MOX-MXCS-1008-47N□	47	50	10/5/2	65	350	1500	0.16	1000	Yellow	Violet	Black
MOX-MXCS-1008-56N□	56	50	10/5/2	65	350	1300	0.18	1000	Green	Blue	Black
MOX-MXCS-1008-68N□	68	50	10/5/2	65	350	1300	0.20	1000	Blue	Gray	Black
MOX-MXCS-1008-82N□	82	50	10/5/2	60	350	1000	0.22	1000	Gray	Red	Black
MOX-MXCS-1008-R10□	100	25	10/5/2	60	350	1000	0.56	650	Brown	Black	Brown
MOX-MXCS-1008-R12□	120	25	10/5/2	60	350	950	0.63	650	Brown	Red	Brown
MOX-MXCS-1008-R15□	150	25	10/5/2	45	100	850	0.70	580	Brown	Green	Brown
MOX-MXCS-1008-R18□	180	25	10/5/2	45	100	750	0.77	620	Brown	Gray	Brown
MOX-MXCS-1008-R22□	220	25	10/5/2	45	100	700	0.84	500	Red	Red	Brown
MOX-MXCS-1008-R27□	270	25	10/5/2	45	100	600	0.91	500	Red	Violet	Brown
MOX-MXCS-1008-R33□	330	25	10/5/2	45	100	570	1.05	450	Orange	Orange	Brown
MOX-MXCS-1008-R39□	390	25	10/5/2	45	100	500	1.12	470	Orange	White	Brown
MOX-MXCS-1008-R47□	470	25	10/5/2	45	100	450	1.19	470	Yellow	Violet	Brown
MOX-MXCS-1008-R56□	560	25	10/5/2	45	100	415	1.33	400	Green	Blue	Brown
MOX-MXCS-1008-R62□	620	25	10/5/2	45	100	375	1.40	300	Blue	Red	Brown
MOX-MXCS-1008-R68□	680	25	10/5/2	45	100	375	1.47	400	Blue	Gray	Brown
MOX-MXCS-1008-R75□	750	25	10/5/2	45	100	360	1.54	360	Violet	Green	Brown
MOX-MXCS-1008-R82□	820	25	10/5/2	45	100	350	1.61	400	Gray	Red	Brown
MOX-MXCS-1008-R91□	910	25	10/5/2	35	50	320	1.68	380	White	Brown	Brown
MOX-MXCS-1008-1R0□	1000	25	10/5/2	35	50	290	1.75	370	Brown	Black	Red
MOX-MXCS-1008-1R2□	1200	7.9	10/5/2	35	50	250	2.0	310	Brown	Red	Red
MOX-MXCS-1008-1R5□	1500	7.9	10/5/2	28	50	200	2.3	330	Brown	Green	Red
MOX-MXCS-1008-1R8□	1800	7.9	10/5/2	28	50	160	2.6	300	Brown	Gray	Red
MOX-MXCS-1008-2R2□	2200	7.9	10/5/2	28	50	160	2.8	280	Red	Red	Red
MOX-MXCS-1008-2R7□	2700	7.9	10/5/2	22	25	140	3.2	290	Red	Violet	Red
MOX-MXCS-1008-3R3□	3300	7.9	10/5/2	22	25	110	3.4	290	Orange	Orange	Red
MOX-MXCS-1008-3R9□	3900	7.9	10/5/2	20	25	100	3.6	260	Orange	White	Red
MOX-MXCS-1008-4R7□	4700	7.9	10/5/2	20	25	90	4.0	260	Yellow	Violet	Red
MOX-MXCS-1008-5R6□	5600	7.9	10/5/2	18	7.9	45	4.0	240	Green	Blue	Red
MOX-MXCS-1008-6R8□	6800	7.9	10/5/2	18	7.9	40	4.9	200	Blue	Gray	Red
MOX-MXCS-1008-8R2□	8200	7.9	10/5/2	18	7.9	25	6.0	170	Gray	Red	Red
MOX-MXCS-1008-100□	10000	2.52	10/5/2	18	7.9	25	8.0	150	Brown	Black	Orange



## LANDING PATTERNS



**SEE PART NUMBER  
CHART ON PAGE 1  
FOR DIMENSIONS**



## MOXIE NOTES

When ordering, please specify tolerance & packaging codes.

- □ Tolerance:  $G = \pm 2\%$ ,  $H = \pm 3\%$ ,  $J = \pm 5\%$ ,  $K = \pm 10\%$ .
- MoxiE packaging : Clear tape and reel is standard.
- L , Q : Agilent/HP4291A+Agilent/HP16197A.
- SRF : Agilent/HP8753D / Agilent/HP4291A.
- Rdc : CH502BC/HP4338B.
- Irms: for a 15°C rise above 25°C ambient.
- Operating temperature range: -40°C to +125°C.
- MoxiE Inductor Corporation specifications subject to change without notice.