

Chip Inductors - MPC233 Series



- High temp. RF inductances
- Excellent Q values even at high frequencies
- Very high self-resonant frequencies (SFRs)
- Tinned or gold plated terminations
- Frequency range: 790 kHz to 500 MHz
- Operating temperature range: -55 °C to +175 °C
- Weight: 0.15 gram

Electrical Data (25°C)

ID Code	Inductance* μH	Q Min	Test Freq. MHz	SFR Min. MHz	DCR Max. Ω	DC Current mA max	Tol** % Min
MPC233 000 010	0.010	60	150	2000	0.04	1000	10
MPC233 000 012	0.012	70	150	1800	0.04	1000	
MPC233 000 015	0.015	75	150	1500	0.04	1000	
MPC233 000 018	0.018	75	150	1500	0.04	1000	
MPC233 000 022	0.022	60	100	1300	0.05	1000	
MPC233 000 027	0.027	60	100	1300	0.05	1000	5
MPC233 000 033	0.033	60	100	1000	0.05	1000	
MPC233 000 039	0.039	60	100	1000	0.06	900	
MPC233 000 047	0.047	65	100	800	0.06	900	
MPC233 000 056	0.056	65	100	760	0.06	900	
MPC233 000 068	0.068	65	100	700	0.07	840	10
MPC233 000 082	0.082	65	100	650	0.07	840	
MPC233 000 100	0.100	65	50	570	0.07	840	
MPC233 000 120	0.120	65	50	520	0.07	840	
MPC233 000 150	0.150	75	50	400	0.08	790	
MPC233 000 180	0.180	75	50	360	0.08	790	5
MPC233 000 220	0.220	70	50	320	0.08	790	
MPC233 000 270	0.270	70	50	270	0.10	700	
MPC233 000 330	0.330	70	50	240	0.10	700	
MPC233 000 390	0.390	70	50	220	0.10	700	
MPC233 000 470	0.470	70	25	190	0.14	590	2
MPC233 000 560	0.560	70	25	170	0.19	510	
MPC233 000 680	0.680	70	25	160	0.26	430	
MPC233 000 820	0.820	75	25	150	0.30	400	
MPC233 001 000	1.00	75	25	130	0.34	380	
MPC233 001 200	1.20	65	7.9	120	0.45	330	2
MPC233 001 500	1.50	65	7.9	110	0.57	290	
MPC233 001 800	1.80	65	7.9	100	0.72	260	
MPC233 002 200	2.20	65	7.9	80	0.90	230	
MPC233 002 700	2.70	65	7.9	60	1.10	210	
MPC233 003 300	3.30	60	7.9	50	1.20	200	2
MPC233 003 900	3.90	60	7.9	45	1.40	180	
MPC233 004 700	4.70	60	7.9	42	1.60	170	
MPC233 005 600	5.60	65	7.9	40	1.80	160	
MPC233 006 800	6.80	65	7.9	37	2.40	140	
MPC233 008 200	8.20	65	7.9	34	3.00	130	2
MPC233 010 000	10.0	65	7.9	29	3.50	120	
MPC233 012 000	12.0	60	2.5	27	3.60	118	
MPC233 015 000	15.0	60	2.5	22	3.70	115	

ID Code	Inductance* μH	Q Min	Test Freq. MHz	SFR Min. MHz	DCR Max. Ω	DC Current mA max	Tol** % Min
MPC233 018 000	18.0	60	2.5	17	3.80	114	2
MPC233 022 000	22.0	60	2.5	16	3.90	113	
MPC233 027 000	27.0	65	2.5	15	4.00	110	
MPC233 033 000	33.0	65	2.5	14	5.00	100	
MPC233 039 000	39.0	65	2.5	13	7.00	84	
MPC233 047 000	47.0	70	2.5	12	8.00	79	
MPC233 056 000	56.0	70	2.5	11	10.0	70	
MPC233 068 000	68.0	65	2.5	10	11.0	67	
MPC233 082 000	82.0	60	2.5	9	12.0	64	
MPC233 100 000	100	60	2.5	8	13.0	62	
MPC233 120 000	120	40	0.79	7	14.0	59	
MPC233 150 000	150	40	0.79	6	16.0	56	
MPC233 180 000	180	40	0.79	5	18.0	52	
MPC233 220 000	220	40	0.79	4	24.0	45	
MPC233 270 000	270	40	0.79	3.3	25.0	44	
MPC233 330 000	330	40	0.79	3.1	29.0	41	
MPC233 390 000	390	40	0.79	2.9	32.0	39	
MPC233 470 000	470	35	0.79	2.4	35.0	37	
MPC233 560 000	560	35	0.79	2.1	45.0	33	
MPC233 680 000	680	35	0.79	1.9	55.0	30	
MPC233 820 000	820	30	0.79	1.8	70.0	26	
MPC233 1000 000	1000	30	0.79	1.7	80.0	25	

* Standard inductance tolerance: $\pm 10\%$

** Tightest achievable tolerances.

Other inductance values and S parameters on request.

Inductance variation: 60 PPM/°Cmax. in the range 0.01 to 1 μH

80 PPM/°Cmax. in the range 1.2 to 10 μH

150 PPM/°Cmax. in the range 12 to 100 μH

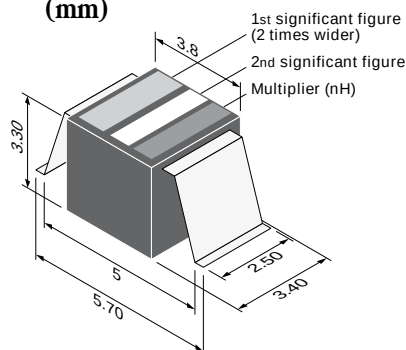
300 PPM/°Cmax. in the range 120 to 1000 μH

To Order

MPC233 ### ## xy

MPC233	### ##	x	y
Range	Inductance Value	Terminations x = G for Gold x = T for Tinned	Tolerance: y = 10 for $\pm 10\%$ y = 5 for $\pm 5\%$ y = 2 for $\pm 2\%$

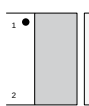
Typical Dimensions (mm)



Packaging

Tray

Connections



PCB Layout (suggested)

