

High Temperature Chip Inductors - MPC1233 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 %
MPC1233 000 010	0.010	60	150	1000	0.04	1000	10
MPC1233 000 012	0.012	70	150	1000	0.04	1000	
MPC1233 000 015	0.015	75	150	1000	0.04	1000	
MPC1233 000 018	0.018	75	150	1000	0.04	1000	
MPC1233 000 022	0.022	60	100	1000	0.05	1000	
MPC1233 000 027	0.027	60	100	1000	0.05	1000	
MPC1233 000 033	0.033	60	100	1000	0.05	1000	
MPC1233 000 039	0.039	60	100	1000	0.06	900	
MPC1233 000 047	0.047	65	100	800	0.06	900	
MPC1233 000 056	0.056	65	100	760	0.06	900	
MPC1233 000 068	0.068	65	100	700	0.07	840	
MPC1233 000 082	0.082	65	100	650	0.07	840	
MPC1233 000 100	0.100	65	50	570	0.07	840	
MPC1233 000 120	0.120	65	50	520	0.07	840	
MPC1233 000 150	0.150	75	50	400	0.08	790	
MPC1233 000 180	0.180	75	50	360	0.08	790	
MPC1233 000 220	0.220	70	50	320	0.08	790	
MPC1233 000 270	0.270	70	50	270	0.10	700	
MPC1233 000 330	0.330	70	50	240	0.10	700	
MPC1233 000 390	0.390	70	50	220	0.10	700	
MPC1233 000 470	0.470	70	25	190	0.14	590	
MPC1233 000 560	0.560	70	25	170	0.19	510	
MPC1233 000 680	0.680	70	25	160	0.26	430	
MPC1233 000 820	0.820	75	25	150	0.30	400	
MPC1233 001 000	1.00	75	25	130	0.34	380	
MPC1233 001 200	1.20	65	7.9	120	0.45	330	
MPC1233 001 500	1.50	65	7.9	110	0.57	290	
MPC1233 001 800	1.80	65	7.9	100	0.72	260	
MPC1233 002 200	2.20	65	7.9	80	0.90	230	
MPC1233 002 700	2.70	65	7.9	60	1.10	210	
MPC1233 003 300	3.30	60	7.9	50	1.20	200	
MPC1233 003 900	3.90	60	7.9	45	1.40	180	
MPC1233 004 700	4.70	60	7.9	42	1.60	170	
MPC1233 005 600	5.60	65	7.9	40	1.80	160	
MPC1233 006 800	6.80	65	7.9	37	2.40	140	
MPC1233 008 200	8.20	65	7.9	34	3.00	130	
MPC1233 010 000	10.0	65	7.9	29	3.50	120	
MPC1233 012 000	12.0	60	2.5	27	3.60	118	
MPC1233 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 %
MPC1233 018 000	18.0	60	2.5	17	3.80	114	10
MPC1233 022 000	22.0	60	2.5	16	3.90	113	
MPC1233 027 000	27.0	65	2.5	15	4.00	110	
MPC1233 033 000	33.0	65	2.5	14	5.00	100	
MPC1233 039 000	39.0	65	2.5	13	7.00	84	
MPC1233 047 000	47.0	70	2.5	12	8.00	79	
MPC1233 056 000	56.0	70	2.5	11	10.0	70	
MPC1233 068 000	68.0	65	2.5	10	11.0	67	
MPC1233 082 000	82.0	60	2.5	9	12.0	64	
MPC1233 100 000	100	60	2.5	8	13.0	62	
MPC1233 120 000	120	40	0.79	7	14.0	59	
MPC1233 150 000	150	40	0.79	6	16.0	56	
MPC1233 180 000	180	40	0.79	5	18.0	52	
MPC1233 220 000	220	40	0.79	4	24.0	45	
MPC1233 270 000	270	40	0.79	3.3	25.0	44	
MPC1233 330 000	330	40	0.79	3;1	29.0	41	
MPC1233 390 000	390	40	0.79	2.9	32.0	39	
MPC1233 470 000	470	35	0.79	2.4	35.0	37	
MPC1233 560 000	560	35	0.79	2.1	45.0	33	
MPC1233 680 000	680	35	0.79	1.9	55.0	30	
MPC1233 820 000	820	30	0.79	1.8	70.0	26	
MPC1233 1000 000	1000	30	0.79	1.7	80.0	25	

Other inductance values on request.

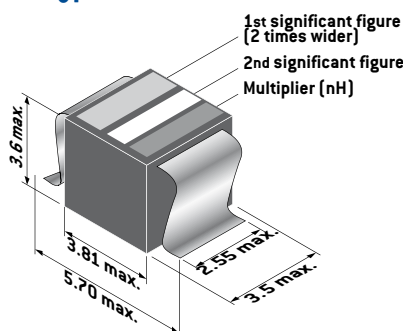
Inductance variation: 60 PPM/°Cmax. in the range 0.01 to 1 μH
 80 PPM/°Cmax. in the range 1.2 to 10 μH
 150 PPM/°Cmax. in the range 12 to 100 μH
 300 PPM/°Cmax. in the range 120 to 1000 μH

To Order

MPC1233 ### ## x10

MPC1233	####	x	y
Range	Inductance Value	Terminations x = G for Gold x = T for Tinned	Tolerance : 10 for $\pm 10\%$

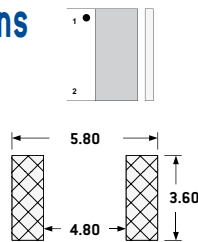
Typical Dimensions (mm)



Packaging

Tray : 24 pieces / tray
 Upon request : tape (lot 150 pieces)
 or tape & reel

Connections



PCB Layout (suggested)

