

A FEATURES

- Low cost, high efficiency option for choke applications
- Low DC-resistance
- Current ratings up to 5 Amps
- Inductance values from 1.0 μ H to 47mH
- Operating Temperature range from -40°C to +125°C (Including Self-heating)

**B PART NUMBER SYSTEM**

1MZ 0810 L - 100 M E
 ① ② ③ ④ ⑤ ⑥

①	Series	②	Dimension Code (D*H) (mm)	
1MZ	Series Code		0608 ($\Phi 7.5_{\max} \times 10_{\max}$)	0810 ($\Phi 10.5_{\max} \times 12_{\max}$)
			1012 ($\Phi 12_{\max} \times 15_{\max}$)	
③	Extended Series Code			
④	Inductance Code	⑤	Inductance Tolerance	
e.g.	Calculation	K	$\pm 10\%$	
2R2	2.2 μ H	M	$\pm 20\%$	
100	$10 \times 10^0 \mu\text{H} = 10 \mu\text{H}$			
101	$10 \times 10^1 \mu\text{H} = 100 \mu\text{H}$			
⑥	RoHS Compliant			

C DRAWINGS AND DIMENSIONS

Drawings	Schematic

Case Size	Dimensions (mm)				
	A _{max}	B _{max}	C _{ref}	D _{ref}	E
1MZ0608L	7.5	10.0	15.0	0.6	3.0 $\pm$ 0.5
1MZ0810L	10.5	12.0	15.0	0.6	5.0 $\pm$ 0.5
1MZ1012L	12.0	15.0	15.0	0.6	5.0 $\pm$ 0.5

D SPECIFICATIONS

Part Number	Inductance		Test Freq.	DCR		Ir
	μH	Tolerance		Max.(Ω)	A	
1MZ0608L-3R3MF	3.3	$\pm 20\%$	100KHz	0.016	3.50	
1MZ0608L-4R7MF	4.7	$\pm 20\%$	100KHz	0.020	3.00	
1MZ0608L-6R8MF	6.8	$\pm 20\%$	100KHz	0.022	2.50	
1MZ0608L-100KF	10	$\pm 10\%$	100KHz	0.039	2.00	
1MZ0608L-150KF	15	$\pm 10\%$	100KHz	0.045	1.70	
1MZ0608L-220KF	22	$\pm 10\%$	100KHz	0.062	1.40	
1MZ0608L-330KF	33	$\pm 10\%$	100KHz	0.100	1.10	
1MZ0608L-470KF	47	$\pm 10\%$	100KHz	0.150	0.95	
1MZ0608L-680KF	68	$\pm 10\%$	100KHz	0.220	0.80	
1MZ0608L-101KF	100	$\pm 10\%$	100KHz	0.350	0.65	
1MZ0608L-151KF	150	$\pm 10\%$	100KHz	0.430	0.54	
1MZ0608L-221KF	220	$\pm 10\%$	100KHz	0.900	0.44	
1MZ0608L-331KF	330	$\pm 10\%$	100KHz	1.500	0.36	
1MZ0608L-471KF	470	$\pm 10\%$	100KHz	1.800	0.30	
1MZ0608L-681KF	680	$\pm 10\%$	100KHz	2.500	0.25	
1MZ0608L-102KF	1000	$\pm 10\%$	100KHz	3.200	0.20	
1MZ0608L-122KF	1200	$\pm 10\%$	100KHz	3.500	0.18	
1MZ0608L-152KF	1500	$\pm 10\%$	100KHz	4.500	0.17	
1MZ0608L-182KF	1800	$\pm 10\%$	100KHz	5.000	0.10	
1MZ0608L-222KF	2200	$\pm 10\%$	100KHz	6.800	0.14	
1MZ0608L-272KF	2700	$\pm 10\%$	100KHz	7.200	0.12	
1MZ0608L-332KF	3300	$\pm 10\%$	100KHz	10.50	0.11	
1MZ0608L-392KF	3900	$\pm 10\%$	100KHz	11.70	0.10	
1MZ0608L-472KF	4700	$\pm 10\%$	100KHz	13.60	0.09	
1MZ0608L-562KF	5600	$\pm 10\%$	100KHz	16.60	0.08	
1MZ0608L-682KF	6800	$\pm 10\%$	100KHz	19.60	0.08	
1MZ0608L-822KF	8200	$\pm 10\%$	100KHz	25.20	0.07	
1MZ0608L-103KF	10000	$\pm 10\%$	100KHz	29.50	0.06	
1MZ0810L-3R3MF	3.3	$\pm 20\%$	100KHz	0.012	5.00	
1MZ0810L-3R9MF	3.9	$\pm 20\%$	100KHz	0.014	4.60	
1MZ0810L-4R7MF	4.7	$\pm 20\%$	100KHz	0.016	4.30	
1MZ0810L-5R6MF	5.6	$\pm 20\%$	100KHz	0.020	3.90	
1MZ0810L-6R8MF	6.8	$\pm 20\%$	100KHz	0.022	3.70	
1MZ0810L-8R2MF	8.2	$\pm 20\%$	100KHz	0.024	3.50	
1MZ0810L-100KF	10	$\pm 10\%$	100KHz	0.025	3.20	
1MZ0810L-120KF	12	$\pm 10\%$	100KHz	0.027	3.00	
1MZ0810L-150KF	15	$\pm 10\%$	100KHz	0.033	2.80	
1MZ0810L-180KF	18	$\pm 10\%$	100KHz	0.039	2.60	
1MZ0810L-220KF	22	$\pm 10\%$	100KHz	0.047	2.40	
1MZ0810L-270KF	27	$\pm 10\%$	100KHz	0.052	2.10	
1MZ0810L-330KF	33	$\pm 10\%$	100KHz	0.075	1.90	
1MZ0810L-390KF	39	$\pm 10\%$	100KHz	0.082	1.70	
1MZ0810L-470KF	47	$\pm 10\%$	100KHz	0.100	1.50	
1MZ0810L-560KF	56	$\pm 10\%$	100KHz	0.150	1.30	
1MZ0810L-680KF	68	$\pm 10\%$	100KHz	0.180	1.20	
1MZ0810L-820KF	82	$\pm 10\%$	100KHz	0.200	1.10	
1MZ0810L-101KF	100	$\pm 10\%$	100KHz	0.210	0.90	
1MZ0810L-121KF	120	$\pm 10\%$	100KHz	0.220	0.80	
1MZ0810L-151KF	150	$\pm 10\%$	100KHz	0.240	0.72	
1MZ0810L-181KF	180	$\pm 10\%$	100KHz	0.280	0.65	
1MZ0810L-221KF	220	$\pm 10\%$	100KHz	0.350	0.60	
1MZ0810L-271KF	270	$\pm 10\%$	100KHz	0.400	0.55	
1MZ0810L-331KF	330	$\pm 10\%$	100KHz	0.470	0.50	
1MZ0810L-391KF	390	$\pm 10\%$	100KHz	0.680	0.46	

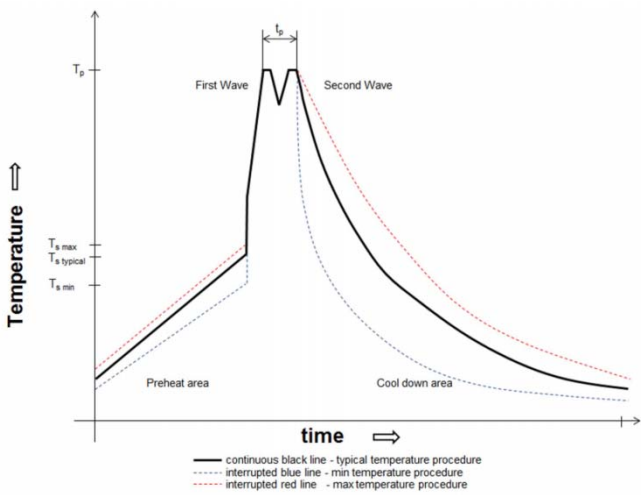
Inductance		Test Freq.	DCR	Ir
Part Number	μH Tolerance		Max.(Ω)	A
1MZ0810L-471KF	470 $\pm 10\%$	100KHz	0.800	0.42
1MZ0810L-561KF	560 $\pm 10\%$	100KHz	1.000	0.38
1MZ0810L-681KF	680 $\pm 10\%$	100KHz	1.200	0.35
1MZ0810L-821KF	820 $\pm 10\%$	100KHz	1.500	0.31
1MZ0810L-102KF	1000 $\pm 10\%$	100KHz	1.800	0.28
1MZ0810L-122KF	1200 $\pm 10\%$	100KHz	2.000	0.25
1MZ0810L-152KF	1500 $\pm 10\%$	100KHz	2.400	0.23
1MZ0810L-182KF	1800 $\pm 10\%$	100KHz	2.800	0.21
1MZ0810L-222KF	2200 $\pm 10\%$	100KHz	3.300	0.19
1MZ0810L-272KF	2700 $\pm 10\%$	100KHz	5.000	0.17
1MZ0810L-332KF	3300 $\pm 10\%$	100KHz	5.600	0.15
1MZ0810L-392KF	3900 $\pm 10\%$	100KHz	6.200	0.14
1MZ0810L-472KF	4700 $\pm 10\%$	100KHz	7.000	0.13
1MZ1012L-1R0MF	1.0 $\pm 20\%$	100KHz	0.011	5.00
1MZ1012L-1R5MF	1.5 $\pm 20\%$	100KHz	0.012	4.80
1MZ1012L-1R8MF	1.8 $\pm 20\%$	100KHz	0.013	4.70
1MZ1012L-2R7MF	2.7 $\pm 20\%$	100KHz	0.015	4.60
1MZ1012L-3R3MF	3.3 $\pm 20\%$	100KHz	0.017	4.50
1MZ1012L-3R9MF	3.9 $\pm 20\%$	100KHz	0.019	4.30
1MZ1012L-4R7MF	4.7 $\pm 20\%$	100KHz	0.020	4.00
1MZ1012L-5R6MF	5.6 $\pm 20\%$	100KHz	0.023	3.80
1MZ1012L-6R8MF	6.8 $\pm 20\%$	100KHz	0.025	3.50
1MZ1012L-8R2MF	8.2 $\pm 20\%$	100KHz	0.027	3.00
1MZ1012L-100KF	10 $\pm 10\%$	100KHz	0.035	2.80
1MZ1012L-120KF	12 $\pm 10\%$	100KHz	0.040	2.70
1MZ1012L-150KF	15 $\pm 10\%$	100KHz	0.045	2.30
1MZ1012L-180KF	18 $\pm 10\%$	100KHz	0.050	2.10
1MZ1012L-220KF	22 $\pm 10\%$	100KHz	0.060	2.00
1MZ1012L-270KF	27 $\pm 10\%$	100KHz	0.070	1.70
1MZ1012L-330KF	33 $\pm 10\%$	100KHz	0.100	1.50
1MZ1012L-390KF	39 $\pm 10\%$	100KHz	0.120	1.40
1MZ1012L-470KF	47 $\pm 10\%$	100KHz	0.125	1.30
1MZ1012L-560KF	56 $\pm 10\%$	100KHz	0.130	1.20
1MZ1012L-680KF	68 $\pm 10\%$	100KHz	0.140	1.00
1MZ1012L-820KF	82 $\pm 10\%$	100KHz	0.150	0.90
1MZ1012L-101KF	100 $\pm 10\%$	100KHz	0.160	0.70
1MZ1012L-121KF	120 $\pm 10\%$	100KHz	0.250	0.68
1MZ1012L-151KF	150 $\pm 10\%$	100KHz	0.280	0.65
1MZ1012L-181KF	180 $\pm 10\%$	100KHz	0.320	0.60
1MZ1012L-221KF	220 $\pm 10\%$	100KHz	0.470	0.50
1MZ1012L-271KF	270 $\pm 10\%$	100KHz	0.530	0.45
1MZ1012L-331KF	330 $\pm 10\%$	100KHz	0.600	0.40
1MZ1012L-391KF	390 $\pm 10\%$	100KHz	0.850	0.35
1MZ1012L-471KF	470 $\pm 10\%$	100KHz	0.950	0.33
1MZ1012L-561KF	560 $\pm 10\%$	100KHz	1.100	0.30
1MZ1012L-681KF	680 $\pm 10\%$	100KHz	1.200	0.25
1MZ1012L-821KF	820 $\pm 10\%$	100KHz	1.300	0.20
1MZ1012L-102KF	1000 $\pm 10\%$	100KHz	1.400	0.18
1MZ1012L-103KF	10000 $\pm 10\%$	100KHz	2.900	0.15
1MZ1012L-223KF	22000 $\pm 10\%$	100KHz	4.500	0.11
1MZ1012L-333KF	33000 $\pm 10\%$	100KHz	5.700	0.08
1MZ1012L-473KF	47000 $\pm 10\%$	100KHz	7.200	0.06

1. Inductance measured @ 100KHz, 0.3V at 25°C temperature.
2. DCR measured @ 25°C.
3. Irms for specified temperature rise from 20°C ambient temperature.
4. Specifications subject to change without notice please check our website for latest information.

E PACKAGING SPECIFICATIONS

Standard Packaging: 300PCS/Plastic Bag

F RECOMMENDED SOLDER REFLOW PROFILE



Profile Feature	Pb-Free Assembly	Sn-Pb Assembly
Preheat - Temperature Min (T_{smin}) - Temperature Typical ($T_{stypical}$) - Temperature Max (T_{smax}) - Time (t_d) from (T_{smin} to T_{smax})	100°C 120°C 130°C 70 seconds	100°C 120°C 130°C 70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)	250°C - 260°C	235°C - 260°C
Time of actual peak temperature (t_p)	max. 10 seconds max. 5 second each wave	max. 10 seconds max. 5 second each wave
Ramp-down rate - Min - Typical - Max	~ 2 K/s ~ 3.5 K/s ~ 5 K/s	~ 2 K/s ~ 3.5 K/s ~ 5 K/s
Time 25°C to 25°C	4 minutes	4 minutes

refer to EN 61760-1:2006