A FEATURES



- High Q at high frequencies
- Low DC-resistance
- Inductance ratings from 1.0 to 1000 μH
- Operating Temperature range from -40°C to +125°C (Including Self-heating)

B PART NUMBER SYSTEM

1MH	3225	-	100	M	F
❶	❷		❸	❹	❺

❶	Series
1MH	Series Code

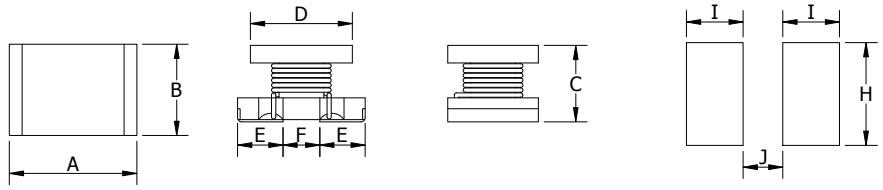
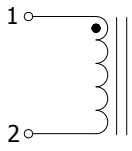
❷	Dimension Code (L*W*H) (mm)	
	3225 (3.2×2.5×2.0)	4532 (4.5×3.2×2.6)

❸	Inductance Code
e.g.	Calculation
2R2	2.2μH
100	10×10^{0}μH = 10μH
101	10×10^{1}μH = 100μH

❹	Inductance Tolerance
K	±10%
M	±20%

❺	RoHS Compliant

C DRAWINGS AND DIMENSIONS

Drawings	Schematic
	

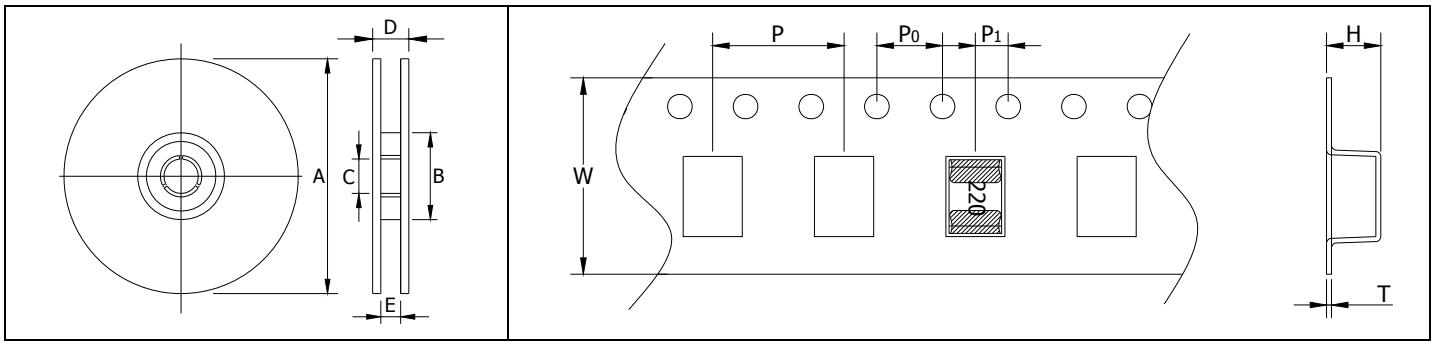
Case Size	Dimensions (mm)						
	A	B	C	D_{ref}	H_{ref}	I_{ref}	J_{ref}
1MH3225	3.2±0.3	2.5±0.3	2.0±0.3	2.4±0.3	2.8	1.4	1.0
1MH4532	4.5±0.3	3.2±0.3	2.6±0.3	3.6±0.3	3.6	2.0	1.4

D SPECIFICATIONS

	Inductance[1]		DCR[2]			$SRF_{typ.}$	
Part Number	μH	Tolerance	Max.(Ω)	Irms[3](A)	Isat[4](A)	MHz	$Q_{ref.}$
1MH3225-1R0MF	1.0	±20%	0.10	0.75	3.20	100	20
1MH3225-1R5MF	1.5	±20%	0.13	0.66	2.10	75	20
1MH3225-1R8MF	1.8	±20%	0.14	0.64	2.00	60	20
1MH3225-2R2MF	2.2	±20%	0.15	0.62	1.80	50	20
1MH3225-2R7MF	2.7	±20%	0.18	0.60	1.60	43	20
1MH3225-3R3MF	3.3	±20%	0.20	0.58	1.50	38	20
1MH3225-3R9MF	3.9	±20%	0.25	0.54	1.35	35	20
1MH3225-4R7MF	4.7	±20%	0.28	0.49	1.25	31	20
1MH3225-5R6MF	5.6	±20%	0.36	0.44	1.15	28	20
1MH3225-6R8MF	6.8	±20%	0.40	0.42	1.10	25	20
1MH3225-8R2MF	8.2	±20%	0.45	0.39	0.95	23	20
1MH3225-100MF	10	±20%	0.65	0.32	0.85	20	35
1MH3225-120KF	12	±10%	0.70	0.29	0.78	18	35
1MH3225-150KF	15	±10%	1.00	0.27	0.70	16	35
1MH3225-180KF	18	±10%	1.10	0.24	0.65	15	35
1MH3225-220KF	22	±10%	1.30	0.22	0.60	14	35
1MH3225-680KF	68	±10%	3.80	0.13	0.30	9	35
1MH3225-101KF	100	±10%	6.50	0.10	0.25	8	40
1MH3225-121KF	120	±10%	7.00	0.095	0.18	7	40
1MH3225-221KF	220	±10%	11.80	0.075	0.16	5	40
1MH3225-331KF	330	±10%	16.50	0.065	0.15	5	40
1MH3225-471KF	470	±10%	25.00	0.055	0.12	5	40
1MH4532-1R0MF	1.0	±20%	0.08	1.80	4.40	165	40
1MH4532-1R5MF	1.5	±20%	0.09	1.75	4.00	130	42
1MH4532-1R8MF	1.8	±20%	0.10	1.70	3.50	100	45
1MH4532-2R2MF	2.2	±20%	0.11	1.60	2.75	80	40
1MH4532-2R7MF	2.7	±20%	0.12	1.50	2.70	63	40
1MH4532-3R3MF	3.3	±20%	0.13	1.40	2.70	58	45
1MH4532-3R9MF	3.9	±20%	0.14	1.32	2.50	54	40
1MH4532-4R7MF	4.7	±20%	0.15	1.24	2.00	45	36
1MH4532-5R6MF	5.6	±20%	0.18	1.18	1.90	41	36
1MH4532-6R8MF	6.8	±20%	0.20	1.10	1.60	37	36
1MH4532-8R2MF	8.2	±20%	0.25	1.00	1.60	34	36
1MH4532-100MF	10	±20%	0.30	0.95	1.50	30	48
1MH4532-120MF	12	±20%	0.42	0.80	1.40	28	48
1MH4532-150MF	15	±20%	0.50	0.73	1.24	26	45
1MH4532-180MF	18	±20%	0.60	0.68	1.10	22	42
1MH4532-220KF	22	±10%	0.70	0.63	1.00	20	50
1MH4532-330KF	33	±10%	1.10	0.43	0.85	18	55
1MH4532-101KF	100	±10%	2.50	0.27	0.45	10	60
1MH4532-151KF	150	±10%	3.70	0.22	0.42	8	55
1MH4532-391KF	390	±10%	13.00	0.11	0.20	5	50
1MH4532-471KF	470	±10%	14.20	0.105	0.18	5	50
1MH4532-681KF	680	±10%	16.80	0.090	0.20	3	45
1MH4532-821KF	820	±10%	20.00	0.085	0.15	2	50
1MH4532-102KF	1000	±10%	30.00	0.070	0.16	2	28

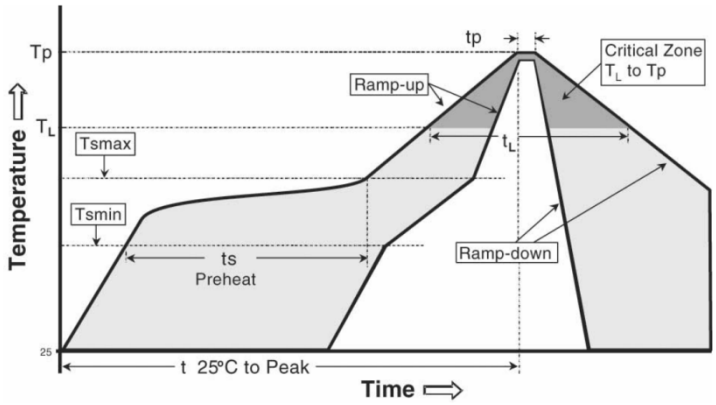
1. Inductance measured @ 100KHz, 0.3V at 25°C temperature.
2. DCR measured @ 25°C.
3. Irms for an approximate 40°C rise from 20°C ambient temperature.
4. Isat for approximate 10% roll off at 25°C.
5. Specifications subject to change without notice please check our website for latest information.

E TAPE AND REEL SPECIFICATIONS



Case Size	Parts per Reel	Reel Dimensions(REF)					Tape Dimensions(REF)					
		A	B	C	D	E	W	P	P_0	P1	H	T
1MH3225	2000	330	100	13	12	8.5	8	4	4	2	2.4	0.25
1MH4532	500	330	100	13	16	12.5	12	8	4	2	3.5	0.30

F RECOMMENDED SOLDER REFLOW PROFILE



Profile Feature	Recommended Conditions
Average ramp-up rate (Tsmax to Tp)	3˚C/second max.
Preheat Temperature Min (Ts_{min}) Temperature Max (Ts_{max}) Time (Ts_{min} to Ts_{max})(ts)	 100˚C 150˚C 60-180 seconds
Time maintained above: Temperature (T_L) Time (t_L)	 217˚C 60-150 seconds
Peak Temperature (Tp)	See Table2
Time within 5˚C of actual Peak Temperature $(tp)^2$	20-40 seconds
Ramp-down Rate	6˚C/second max.
Time 25˚C to Peak Temperature	8 minutes max

Table 1

Package Thickness	Volume mm^3 <350	Volume mm^3 350 - 2000	Volume mm^3 >2000
< 1.6mm	260˚C	260˚C	260˚C
1.6mm - 2.5mm	260˚C	250˚C	245˚C
>2.5mm	250˚C	245˚C	245˚C

Table 2

1. The above profiles are based on IPC/JEDEC J-STD-020C.
2. Exceeding these conditions may cause lowered product reliability.