

1. Features

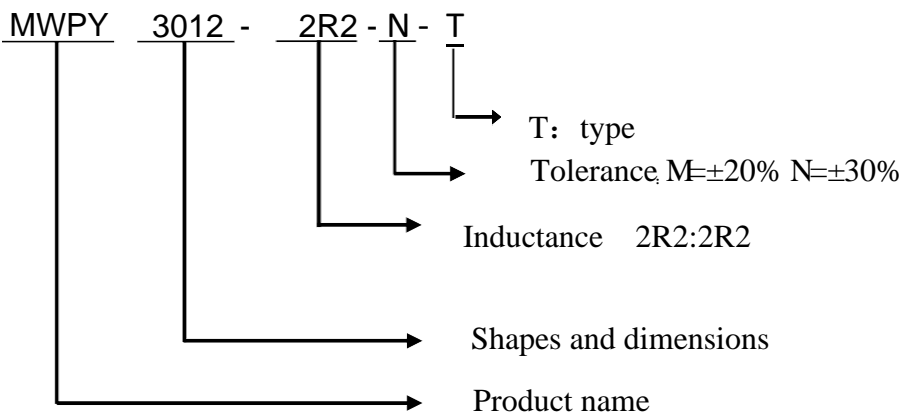
- The inductor designed as surface mounting , smallest and thinnest with high power , high saturation and low resistance.
- Magnetic-resin shielded structure reduces buzz noise to ultra-low levels , Closed magnetic circuit structure reduces magnetic leakage flux , high performance of anti-EMI .
- Compared with the same size part , the rated current 30% higher than the traditional inductors .
- Wide range working frequency that reach more than 5MHz
- RoHS ,Halogen-free environmental protection products

2 Applications

- LED Lighting
- Automotive systems
- Notebooks, desktop computers, servers, graphic cards



3. Product Identification



4 Shape and Dimension (Unit:mm)

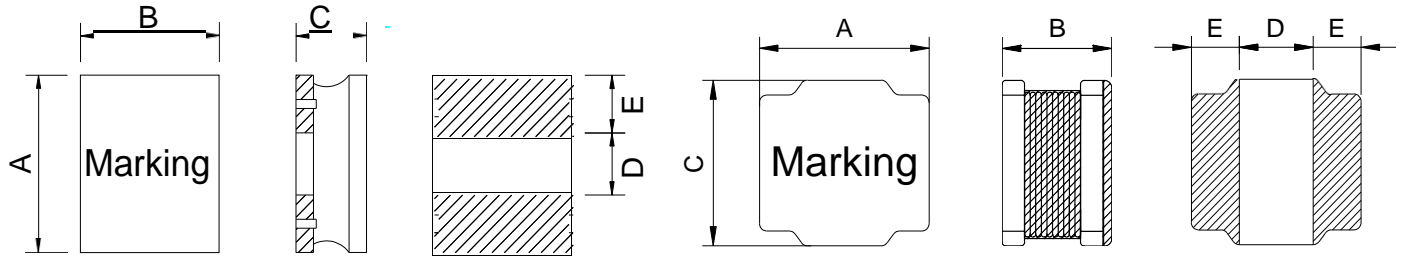


Fig 1

Fig 2

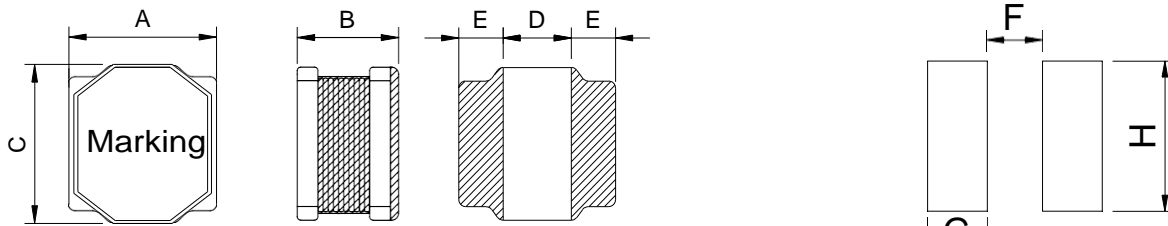


Fig 3

Recommended patterns

TYPE(型号)	A	B	C	D	E	F	G	H	Fig
MWPY201610	2.0±0.3	1.6±0.3	1.05 Max	0.7±0.3	0.65±0.3	0.6	0.8	1.8	1
MWPY252010	2.5±0.3	2.0±0.3	1.05 Max	0.94±0.3	0.83±0.3	0.6	1.1	2.0	1
MWPY252012	2.5±0.3	2.0±0.3	1.25 Max	0.94±0.3	0.83±0.3	0.6	1.1	2.0	1
MWPY3012	3.0±0.2	1.3 Max	3.0±0.2	1.2±0.3	0.9±0.3	0.7	1.4	2.7	3
MWPY3015	3.0±0.2	1.7 Max	3.0±0.2	1.2±0.3	0.9±0.3	0.7	1.4	2.7	3
MWPY4018	4.0±0.2	1.8 Max	4.0±0.2	1.6±0.3	1.2±0.3	1.0	1.7	3.7	3
MWPY4020	4.0±0.2	2.0 Max	4.0±0.2	1.6±0.3	1.2±0.3	1.0	1.7	3.7	3
MWPY4030	4.0±0.2	3.0 Max	4.0±0.2	1.3±0.3	1.35±0.3	0.8	1.9	3.7	3
MWPY5020	5.0±0.2	2.1 Max	5.0±0.2	1.4±0.3	1.8±0.3	0.9	2.3	4.2	2
MWPY5040	5.0±0.2	4.0 Max	5.0±0.2	1.8±0.3	1.6±0.3	1.1	2.2	4.2	3
MWPY6020	6.0±0.3	2.1 Max	6.0±0.3	2.3±0.3	1.85±0.3	1.8	2.4	5.7	2
MWPY6028	6.0±0.3	3.0 Max	6.0±0.3	2.5±0.3	1.75±0.3	1.8	2.4	5.7	2
MWPY6045	6.0±0.3	4.7 Max	6.0±0.3	2.3±0.3	1.85±0.3	1.8	2.4	5.7	2
MWPY8040	8.0±0.3	4.2 Max	8.0±0.3	3.6±0.3	2.2±0.3	3.1	2.7	7.5	2
MWPY8060	8.0±0.3	6.2 Max	8.0±0.3	3.6±0.3	2.2±0.3	3.1	2.7	7.5	2
MWPY8080	8.0±0.3	8.0 Max	8.0±0.3	3.6±0.3	2.2±0.3	3.1	2.7	7.5	2

5. Electronic Characteristics List

MWPY201610Series

PART NUMBER	INDUCTANCE (μ H)	DCR (Max) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	Marker
MWPY201610-1R0-N-T	1 \pm 30%	0.114	1.65	1.45	/
MWPY201610-1R5-N-T	1.5 \pm 30%	0.174	1.35	1.25	/
MWPY201610-2R2-N-T	2.2 \pm 30%	0.264	1.10	1.10	/
MWPY201610-3R3-M-T	3.3 \pm 20%	0.335	0.90	0.88	/
MWPY201610-4R7-M-T	4.7 \pm 20%	0.479	0.70	0.74	/
MWPY201610-6R8-M-T	6.8 \pm 20%	0.816	0.60	0.52	/

MWPY252010 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (Max.) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	Marker 印字
MWPY252010-1R0-N-T	1 \pm 30%	0.108 Max.	1.85	1.65	A
MWPY252010-1R5-N-T	1.5 \pm 30%	0.182 Max.	1.80	1.30	B
MWPY252010-2R2-N-T	2.2 \pm 30%	0.209 Max.	1.20	1.20	C
MWPY252010-3R3-M-T	3.3 \pm 20%	0.328 Max.	1.05	0.90	D
MWPY252010-4R7-M-T	4.7 \pm 20%	0.563 Max.	0.95	0.70	E
MWPY252010-5R6-M-T	5.6 \pm 20%	0.563 Max.	0.80	0.73	F
MWPY252010-6R8-M-T *	6.8 \pm 20%	0.896 Max.	0.78	0.59	G

Remark: 1. Inductance Tested at 1MHz, 0.2Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C
5. MWPY252010-6R8, MWPY252010-6R8 Absolute maximum voltage: DC 9V

MWPY252012 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (Max.) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	Marker 印字
MWPY252012-R47-N-T	0.47 \pm 30%	0.085	3.82	1.95	A
MWPY252012-R68-N-T	0.68 \pm 30%	0.098	3.28	1.93	B
MWPY252012-1R0-N-T	1.0 \pm 30%	0.090	2.59	1.93	C
MWPY252012-1R5-N-T	1.5 \pm 30%	0.147	2.24	1.40	E
MWPY252012-2R2-N-T	2.2 \pm 30%	0.216	1.85	1.15	F
MWPY252012-3R3-M-T	3.3 \pm 20%	0.264	1.61	1.04	G
MWPY252012-4R7-M-T	4.7 \pm 20%	0.377	1.12	0.84	H
MWPY252012-6R8-M-T	6.8 \pm 20%	0.581	0.98	0.69	J
MWPY252012-100-M-T	10 \pm 20%	0.690	0.79	0.62	K

Remark: 1. Inductance Tested at 1MHz, 0.2Vrms (20 $^{\circ}$ C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^{\circ}C$) from 25 $^{\circ}$ C ambient.
4. Operating Temperature : -40 $^{\circ}$ C ~ +125 $^{\circ}$ C
5. MWPY252012-150-M-T, MWPY252012-220-M-T Absolute maximum voltage: DC 9V

MWPY3012 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (\pm 30%) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY3012-1R0-N-T	1 \pm 30%	0.040	1.87	2.20	120
MWPY3012-1R5-N-T	1.5 \pm 30%	0.045	1.62	2.01	110
MWPY3012-2R2-N-T	2.2 \pm 30%	0.075	1.20	1.55	84
MWPY3012-3R3-M-T	3.3 \pm 20%	0.100	1.05	1.36	64
MWPY3012-4R7-M-T	4.7 \pm 20%	0.150	0.90	1.24	61
MWPY3012-6R8-M-T	6.8 \pm 20%	0.190	0.75	0.98	61
MWPY3012-100-M-T	10 \pm 20%	0.320	0.60	0.83	42
MWPY3012-150-M-T	15 \pm 20%	0.360	0.45	0.71	27
MWPY3012-220-M-T	22 \pm 20%	0.645	0.42	0.53	23
MWPY3012-330-M-T	33 \pm 20%	0.875	0.36	0.46	18
MWPY3012-470-M-T	47 \pm 20%	1.450	0.27	0.35	14

MWPY3015 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (\pm 30%) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY3015-1R0-N-T	1 \pm 30%	0.039	2.32	2.35	150
MWPY3015-1R5-N-T	1.5 \pm 30%	0.050	2.00	1.70	100
MWPY3015-2R2-N-T	2.2 \pm 30%	0.060	1.60	1.60	86
MWPY3015-3R3-M-T	3.3 \pm 20%	0.080	1.32	1.36	68
MWPY3015-4R7-M-T	4.7 \pm 20%	0.125	1.10	1.09	46
MWPY3015-6R8-M-T	6.8 \pm 20%	0.200	0.85	0.85	39
MWPY3015-100-M-T	10 \pm 20%	0.250	0.72	0.77	41
MWPY3015-150-M-T	15 \pm 20%	0.350	0.66	0.65	30
MWPY3015-220-M-T	22 \pm 20%	0.460	0.52	0.57	23
MWPY3015-330-M-T	33 \pm 20%	0.820	0.44	0.43	20
MWPY3015-470-M-T	47 \pm 20%	1.250	0.35	0.35	14

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;

3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.

4. Operating Temperature : -40°C ~ +125°C

MWPY4018 Series

PART NUMBER	INDUCTANCE (μH)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY4018-R47-N-T	0.47 $\pm 30\%$	0.023	4.30	2.50	85
MWPY4018-1R0-N-T	1 $\pm 30\%$	0.025	4.20	2.00	80
MWPY4018-1R5-N-T	1.5 $\pm 30\%$	0.030	3.35	1.80	65
MWPY4018-2R2-N-T	2.2 $\pm 30\%$	0.045	2.70	1.65	52
MWPY4018-3R3-M-T	3.3 $\pm 20\%$	0.070	2.45	1.23	44
MWPY4018-4R7-M-T	4.7 $\pm 20\%$	0.090	1.70	1.20	34
MWPY4018-6R8-M-T	6.8 $\pm 20\%$	0.110	1.45	1.06	29
MWPY4018-100-M-T	10 $\pm 20\%$	0.180	1.30	0.84	24
MWPY4018-150-M-T	15 $\pm 20\%$	0.250	0.94	0.65	19
MWPY4018-220-M-T	22 $\pm 20\%$	0.360	0.80	0.59	16
MWPY4018-330-M-T	33 $\pm 20\%$	0.530	0.56	0.49	12
MWPY4018-470-M-T	47 $\pm 20\%$	0.650	0.57	0.42	10
MWPY4018-680-M-T	68 $\pm 20\%$	1.000	0.47	0.32	8.3
MWPY4018-101-M-T	100 $\pm 20\%$	1.750	0.40	0.25	6.5
MWPY4018-151-M-T	150 $\pm 20\%$	2.500	0.30	0.22	5.5

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY4020 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY4020-1R0-N-T	1 $\pm 30\%$	0.029	4.78	2.15	75
MWPY4020-1R5-N-T	1.5 $\pm 30\%$	0.035	4.45	1.98	71
MWPY4020-2R2-N-T	2.2 $\pm 30\%$	0.040	3.40	1.85	49
MWPY4020-3R3-M-T	3.3 $\pm 20\%$	0.070	3.20	1.40	44
MWPY4020-4R7-M-T	4.7 $\pm 20\%$	0.075	2.35	1.34	42
MWPY4020-6R8-M-T	6.8 $\pm 20\%$	0.125	2.00	1.04	33
MWPY4020-100-M-T	10 $\pm 20\%$	0.165	1.60	0.90	26
MWPY4020-150-M-T	15 $\pm 20\%$	0.230	1.35	0.77	24
MWPY4020-220-M-T	22 $\pm 20\%$	0.350	1.05	0.62	15
MWPY4020-330-M-T	33 $\pm 20\%$	0.550	0.85	0.49	11
MWPY4020-470-M-T	47 $\pm 20\%$	0.710	0.74	0.44	10
MWPY4020-560-M-T	56 $\pm 20\%$	0.800	0.66	0.41	10
MWPY4020-680-M-T	68 $\pm 20\%$	1.060	0.61	0.36	7.7
MWPY4020-820-M-T	82 $\pm 20\%$	1.170	0.50	0.34	7.2
MWPY4020-101-M-T	100 $\pm 20\%$	1.550	0.48	0.31	6.3
MWPY4020-151-M-T	150 $\pm 20\%$	2.800	0.40	0.25	3

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY4030 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY4030-1R0-N-T	1 $\pm 30\%$	0.016	5.26	4.14	70
MWPY4030-1R5-N-T	1.5 $\pm 30\%$	0.025	4.84	3.34	62
MWPY4030-2R2-N-T	2.2 $\pm 30\%$	0.030	4.40	2.95	52
MWPY4030-3R3-M-T	3.3 $\pm 20\%$	0.040	3.30	2.40	38
MWPY4030-4R7-M-T	4.7 $\pm 20\%$	0.060	2.90	2.00	31
MWPY4030-6R8-M-T	6.8 $\pm 20\%$	0.090	2.75	1.60	24
MWPY4030-100-M-T	10 $\pm 20\%$	0.120	1.95	1.50	21
MWPY4030-150-M-T	15 $\pm 20\%$	0.190	1.65	1.11	16
MWPY4030-220-M-T	22 $\pm 20\%$	0.225	1.30	1.00	10
MWPY4030-330-M-T	33 $\pm 20\%$	0.330	1.10	0.84	10
MWPY4030-470-M-T	47 $\pm 20\%$	0.445	0.95	0.72	8.4
MWPY4030-680-M-T	68 $\pm 20\%$	0.868	0.72	0.52	7
MWPY4030-101-M-T	100 $\pm 20\%$	1.150	0.60	0.45	5.6
MWPY4030-121-M-T	120 $\pm 20\%$	1.300	0.53	0.42	5.4
MWPY4030-151-M-T	150 $\pm 20\%$	1.800	0.50	0.39	4
MWPY4030-181-M-T	180 $\pm 20\%$	2.200	0.45	0.38	4
MWPY4030-221-M-T	220 $\pm 20\%$	2.500	0.40	0.35	3.8
MWPY4030-331-M-T	330 $\pm 20\%$	4.000	0.30	0.25	3
MWPY4030-471-M-T	470 $\pm 20\%$	7.200	0.30	0.20	2

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY5020 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY5020-R47-N-T	0.47 $\pm 30\%$	0.013	6.20	4.60	118
MWPY5020-1R0-N-T	1 $\pm 30\%$	0.020	4.10	3.80	114
MWPY5020-1R5-N-T	1.5 $\pm 30\%$	0.030	4.10	3.20	68
MWPY5020-2R2-N-T	2.2 $\pm 30\%$	0.040	3.20	2.70	57
MWPY5020-3R3-M-T	3.3 $\pm 20\%$	0.050	2.55	2.30	46
MWPY5020-4R7-M-T	4.7 $\pm 20\%$	0.057	2.50	2.20	37
MWPY5020-6R8-M-T	6.8 $\pm 20\%$	0.083	2.05	1.80	30
MWPY5020-100-M-T	10 $\pm 20\%$	0.120	1.70	1.55	24
MWPY5020-150-M-T	15 $\pm 20\%$	0.165	1.35	1.25	20
MWPY5020-220-M-T	22 $\pm 20\%$	0.250	1.15	1.10	14
MWPY5020-330-M-T	33 $\pm 20\%$	0.400	0.92	0.90	10
MWPY5020-470-M-T	47 $\pm 20\%$	0.580	0.77	0.75	7
MWPY5020-680-M-T	68 $\pm 20\%$	0.740	0.65	0.64	6
MWPY5020-101-M-T	100 $\pm 20\%$	1.100	0.53	0.40	6

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY5040 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY5040-1R0-N-T	1 $\pm 30\%$	0.012	7.35	4.90	117
MWPY5040-1R2-N-T	1.2 $\pm 30\%$	0.016	6.50	4.15	110
MWPY5040-1R5-N-T	1.5 $\pm 30\%$	0.018	6.30	4.00	86
MWPY5040-2R2-N-T	2.2 $\pm 30\%$	0.019	4.90	3.80	50
MWPY5040-3R3-M-T	3.3 $\pm 20\%$	0.024	3.95	3.40	32
MWPY5040-4R7-M-T	4.7 $\pm 20\%$	0.032	3.50	3.00	28
MWPY5040-6R8-M-T	6.8 $\pm 20\%$	0.043	2.90	2.50	21
MWPY5040-100-M-T	10 $\pm 20\%$	0.064	2.35	2.10	18
MWPY5040-150-M-T	15 $\pm 20\%$	0.086	2.00	2.00	13
MWPY5040-220-M-T	22 $\pm 20\%$	0.129	1.60	1.50	11
MWPY5040-330-M-T	33 $\pm 20\%$	0.188	1.30	1.20	9
MWPY5040-470-M-T	47 $\pm 20\%$	0.272	1.10	1.00	7
MWPY5040-680-M-T	68 $\pm 20\%$	0.400	0.90	0.80	6
MWPY5040-101-M-T	100 $\pm 20\%$	0.560	0.75	0.70	5
MWPY5040-151-M-T	150 $\pm 20\%$	0.750	0.65	0.60	3.7
MWPY5040-181-M-T	180 $\pm 20\%$	1.200	0.60	0.48	3.2
MWPY5040-221-M-T	220 $\pm 20\%$	1.280	0.48	0.40	3
MWPY5040-331-M-T	330 $\pm 20\%$	2.100	0.42	0.36	2.7
MWPY5040-471-M-T	470 $\pm 20\%$	3.000	0.37	0.35	2
MWPY5040-681-M-T	680 $\pm 20\%$	4.200	0.30	0.25	1.3

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;

3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.

4. Operating Temperature : -40°C ~ +125°C

MWPY6020 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (\pm 30%) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY6020-1R0-N-T	1 \pm 30%	0.020	4.15	3.50	100
MWPY6020-1R5-N-T	1.5 \pm 30%	0.022	4.25	3.20	79
MWPY6020-2R2-N-T	2.2 \pm 30%	0.028	3.75	2.75	61
MWPY6020-3R3-M-T	3.3 \pm 20%	0.035	3.15	2.60	51
MWPY6020-4R7-M-T	4.7 \pm 20%	0.058	3.00	2.00	41
MWPY6020-6R8-M-T	6.8 \pm 20%	0.079	2.20	1.80	31
MWPY6020-100-M-T	10 \pm 20%	0.105	1.75	1.40	27
MWPY6020-120-M-T	12 \pm 20%	0.120	1.45	1.30	25
MWPY6020-150-M-T	15 \pm 20%	0.145	1.20	1.20	21
MWPY6020-180-M-T	18 \pm 20%	0.180	1.20	1.08	18
MWPY6020-220-M-T	22 \pm 20%	0.204	1.05	1.00	16
MWPY6020-330-M-T	33 \pm 20%	0.300	0.95	0.84	11
MWPY6020-470-M-T	47 \pm 20%	0.430	0.70	0.80	10
MWPY6020-101-M-T	100 \pm 20%	1.100	0.40	0.40	7

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY6028 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY6028-1R0-N-T	1 $\pm 30\%$	0.013	5.75	5.20	70
MWPY6028-1R5-N-T	1.5 $\pm 30\%$	0.015	6.00	4.58	65
MWPY6028-2R2-N-T	2.2 $\pm 30\%$	0.02	5.10	3.75	48
MWPY6028-3R3-M-T	3.3 $\pm 20\%$	0.025	4.15	3.48	41
MWPY6028-4R7-M-T	4.7 $\pm 20\%$	0.03	3.00	3.08	35
MWPY6028-6R8-M-T	6.8 $\pm 20\%$	0.047	2.60	2.40	27
MWPY6028-100-M-T	10 $\pm 20\%$	0.072	2.04	1.95	23
MWPY6028-150-M-T	15 $\pm 20\%$	0.125	1.75	1.45	18
MWPY6028-180-M-T	18 $\pm 20\%$	0.12	1.52	1.45	15
MWPY6028-220-M-T	22 $\pm 20\%$	0.14	1.45	1.40	14
MWPY6028-330-M-T	33 $\pm 20\%$	0.185	1.35	1.22	12
MWPY6028-470-M-T	47 $\pm 20\%$	0.315	1.15	1.06	9.5
MWPY6028-680-M-T	68 $\pm 20\%$	0.36	0.80	0.86	7.7
MWPY6028-820-M-T	82 $\pm 20\%$	0.50	0.80	0.70	7.3
MWPY6028-101-M-T	100 $\pm 20\%$	0.50	0.65	0.70	7
MWPY6028-151-M-T	150 $\pm 20\%$	1.00	0.50	0.50	4.5
MWPY6028-221-M-T	220 $\pm 20\%$	1.25	0.45	0.45	3.5
MWPY6028-331-M-T	330 $\pm 20\%$	1.90	0.35	0.38	2.5

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY6045 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY6045-1R0-N-T	1 $\pm 30\%$	0.011	9.85	5.14	100
MWPY6045-1R5-N-T	1.5 $\pm 30\%$	0.012	8.80	4.95	65
MWPY6045-2R2-N-T	2.2 $\pm 30\%$	0.014	6.75	4.60	52
MWPY6045-3R3-M-T	3.3 $\pm 20\%$	0.024	5.90	3.70	32
MWPY6045-4R7-M-T	4.7 $\pm 20\%$	0.031	4.97	3.30	24
MWPY6045-6R8-M-T	6.8 $\pm 20\%$	0.035	3.90	3.00	20
MWPY6045-100-M-T	10 $\pm 20\%$	0.048	3.20	2.45	15
MWPY6045-150-M-T	15 $\pm 20\%$	0.068	2.50	2.05	12
MWPY6045-220-M-T	22 $\pm 20\%$	0.089	2.05	1.80	10
MWPY6045-330-M-T	33 $\pm 20\%$	0.137	1.65	1.45	7.8
MWPY6045-470-M-T	47 $\pm 20\%$	0.200	1.40	1.20	6.4
MWPY6045-680-M-T	68 $\pm 20\%$	0.289	1.20	1.00	5.5
MWPY6045-820-M-T	82 $\pm 20\%$	0.341	1.05	0.90	5
MWPY6045-101-M-T	100 $\pm 20\%$	0.433	0.95	0.80	4.2
MWPY6045-121-M-T	120 $\pm 20\%$	0.484	0.85	0.77	4
MWPY6045-151-M-T	150 $\pm 20\%$	0.580	0.80	0.70	3.8
MWPY6045-221-M-T	220 $\pm 20\%$	0.834	0.70	0.59	3.5
MWPY6045-331-M-T	330 $\pm 20\%$	1.270	0.57	0.57	2.8
MWPY6045-471-M-T	470 $\pm 20\%$	1.800	0.50	0.42	2
MWPY6045-681-M-T	680 $\pm 20\%$	2.500	0.42	0.33	1.7

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;

3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.

4. Operating Temperature : -40°C ~ +125°C

MWPY8040 Series

PART NUMBER	INDUCTANCE (μ H)	DCR ($\pm 30\%$) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)	S.R.F.(Min.) (MHz)
MWPY8040-1R0-N-T	1 $\pm 30\%$	0.008	9.85	6.30	89
MWPY8040-1R5-N-T	1.5 $\pm 30\%$	0.010	8.15	5.65	67
MWPY8040-2R2-N-T	2.2 $\pm 30\%$	0.012	7.10	5.15	41
MWPY8040-3R3-M-T	3.3 $\pm 20\%$	0.017	6.50	4.40	27
MWPY8040-4R7-M-T	4.7 $\pm 20\%$	0.019	5.90	4.10	24
MWPY8040-6R8-M-T	6.8 $\pm 20\%$	0.024	4.55	3.60	20
MWPY8040-8R2-M-T	8.2 $\pm 20\%$	0.026	4.20	3.45	17
MWPY8040-100-M-T	10 $\pm 20\%$	0.042	3.60	3.30	15
MWPY8040-150-M-T	15 $\pm 20\%$	0.047	2.95	2.60	12
MWPY8040-220-M-T	22 $\pm 20\%$	0.069	2.40	2.10	9.5
MWPY8040-330-M-T	33 $\pm 20\%$	0.097	2.05	1.80	7.8
MWPY8040-470-M-T	47 $\pm 20\%$	0.136	1.75	1.55	6.4
MWPY8040-560-M-T	56 $\pm 20\%$	0.180	1.55	1.30	5.5
MWPY8040-680-M-T	68 $\pm 20\%$	0.196	1.45	1.25	4.9
MWPY8040-820-M-T	82 $\pm 20\%$	0.225	1.30	1.15	4.5
MWPY8040-101-M-T	100 $\pm 20\%$	0.290	1.15	1.00	4.2
MWPY8040-121-M-T	120 $\pm 20\%$	0.334	1.12	0.95	3.5
MWPY8040-151-M-T	150 $\pm 20\%$	0.410	1.00	0.85	3.2
MWPY8040-221-M-T	220 $\pm 20\%$	0.650	0.85	0.80	3
MWPY8040-331-M-T	330 $\pm 20\%$	0.889	0.68	0.64	2.8
MWPY8040-471-M-T	470 $\pm 20\%$	1.260	0.60	0.54	2.1
MWPY8040-681-M-T	680 $\pm 20\%$	2.500	0.50	0.45	1.7

Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;
3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.
4. Operating Temperature : -40°C ~ +125°C

MWPY8060 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (\pm 30%) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)
MWPY8060-100-M-T	10 \pm 20%	0.035	5.00	3.20
MWPY8060-220-M-T	22 \pm 20%	0.06	3.00	2.80
MWPY8060-330-M-T	33 \pm 20%	0.09	2.50	2.10
MWPY8060-470-M-T	47 \pm 20%	0.125	1.85	1.60
MWPY8060-820-M-T	82 \pm 20%	0.23	1.30	1.20
MWPY8060-101-M-T	100 \pm 20%	0.25	1.20	0.91
MWPY8060-151-M-T	150 \pm 20%	0.35	1.15	0.90
MWPY8060-221-M-T	220 \pm 20%	0.58	1.10	0.88
MWPY8060-331-M-T	330 \pm 20%	0.80	0.90	0.65
MWPY8060-471-M-T	470 \pm 20%	1.30	0.80	0.55
MWPY8060-681-M-T	680 \pm 20%	1.60	0.70	0.48

MWPY8080 Series

PART NUMBER	INDUCTANCE (μ H)	DCR (\pm 30%) (Ω)	Isat (Max.) (A)	Irms (Max.) (A)
MWPY8080-100-M-T	10 \pm 20%	0.035	6.00	3.50
MWPY8080-150-M-T	15 \pm 20%	0.045	4.50	3.00
MWPY8080-220-M-T	22 \pm 20%	0.055	4.00	3.00
MWPY8080-330-M-T	33 \pm 20%	0.075	3.00	2.50
MWPY8080-820-M-T	82 \pm 20%	0.150	2.20	1.50
MWPY8080-101-M-T	100 \pm 20%	0.19	1.90	1.12
MWPY8080-151-M-T	150 \pm 20%	0.30	1.60	1.00
MWPY8080-221-M-T	220 \pm 20%	0.42	1.20	0.80

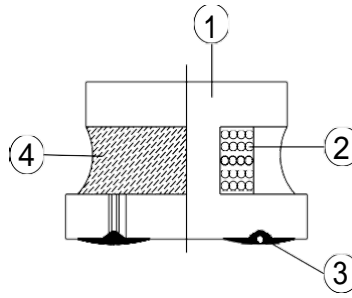
Remark: 1. Inductance Tested at 100kHz, 1Vrms (20°C)

2. Isat: DC current at which the inductance drops approximate 30% from its value without current;

3. Irms: DC current that causes the temperature rise ($\Delta T \leq 40^\circ\text{C}$) from 25°C ambient.

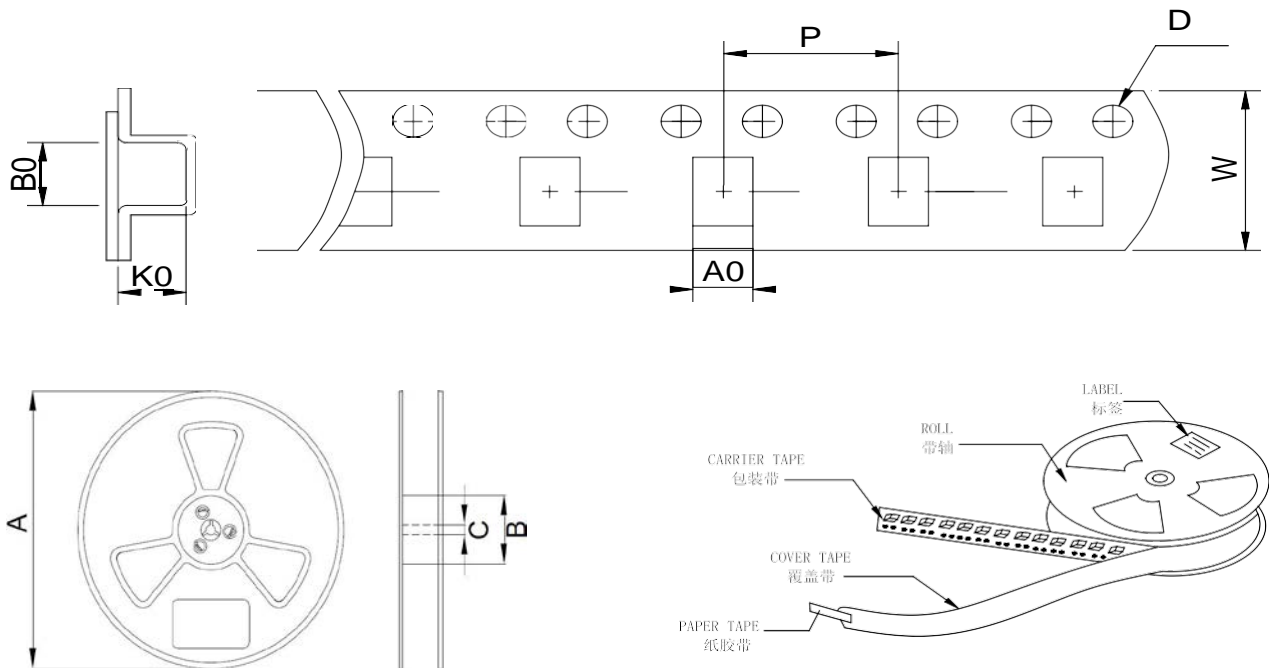
4. Operating Temperature : -40°C ~ +125°C

6. Construction and materials



- | | |
|----------------|---------------------------|
| ① Freeite core | Ni-Zn Ferrite |
| ② Winding wire | Polyurethane-copper wire |
| ③ Electrode | External electrode |
| ④ Epoxy resin | containing ferrite powder |

7. Package Specification



Type	Tape Dimension (mm)						Reel Dimension (mm)			Quantity (Pcs/Reel)
	W	A0	B0	K0	D	P	A	B	C	
MWPY201610	8	1.9	2.3	1.2	1.5	4	178	58	13	2000
MWPY252010	8	2.4	2.9	1.35	1.5	4	178	58	13	2000
MWPY252012	8	2.4	2.9	1.35	1.5	4	178	58	13	2000
MWPY3012	8	3.3	3.3	1.4	1.5	4	178	58	13	2000
MWPY3015	8	3.3	3.3	1.85	1.5	4	178	58	13	2000
MWPY4018	12	4.3	4.3	2	1.5	8	330	100	13	3000
MWPY4020	12	4.3	4.3	2.2	1.5	8	330	100	13	3000
MWPY4030	12	4.3	4.3	3.2	1.5	8	330	100	13	2000
MWPY5020	12	5.3	5.3	2.3	1.5	8	330	100	13	3000
MWPY5040	12	5.3	5.3	4.2	1.5	8	330	100	13	1500
MWPY6020	16	6.4	6.4	2.2	1.5	8	330	100	13	2500
MWPY6028	16	6.4	6.4	3.1	1.5	8	330	100	13	2000
MWPY6045	16	6.4	6.4	4.75	1.5	8	330	100	13	1500
MWPY8040	16	8.4	8.4	4.2	1.5	12	330	100	13	1000
MWPY8060	16	8.4	8.4	6.5	1.5	12	330	100	13	800
MWPY8080	16	8.4	8.4	8.2	1.5	12	330	100	13	500