

⊕ Feature

- High current saturation.
- Frequency range up to 5.0 MHz.
- Lowest DCR/uH,in thispackage size.

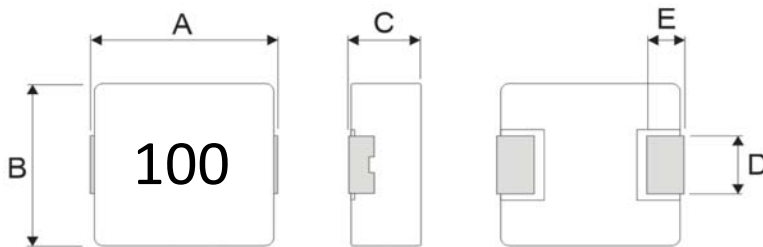
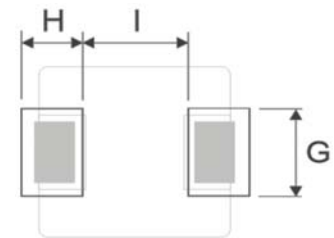
⊕ Applications

- DC to DC converters.
- Battery powered devices.
- PDA/Notebook/Desktop/Server applications.

⊕ Product Identification :


Series name	Dimensions(LxWxH)		Internal code
MPL	0420	4.49*4.06*2.0mm	AT=Carbonyl Iron Particle
	1770	17.5*17.0*7.0mm	

Inductance		Tolerance	
1R0	1 μ H	M	20%
101	100 μ H		

⊕ Shapes And Dimensions

⊕ Recommended PCB Pattern


Part No.	Dimensions(mm)								
	A	B	C	D	E		G	H	I
MPL0420AT	4.49±0.40	4.06±0.30	2.0 Max.	1.8±0.50	1.1±0.30		2.5 Ref	1.5 Ref	2.2 Ref
MPL0518AT	5.5±0.40	5.2±0.30	1.8 Max.	2.0±0.50	1.2±0.30		2.8 Ref	1.9 Ref	2.2 Ref
MPL0520AT	5.5±0.40	5.2±0.30	2.0 Max.	2.0±0.50	1.2±0.30		2.8 Ref	1.9 Ref	2.2 Ref
MPL0530AT	5.5±0.40	5.2±0.30	3.0 Max.	2.0±0.30	1.2±0.30		2.8 Ref	1.9 Ref	2.2 Ref
MPL0618AT	7.0±0.50	6.6±0.30	1.8 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL0620AT	7.0±0.50	6.6±0.30	2.0 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL0624AT	7.0±0.50	6.6±0.30	2.4 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL0630AT	7.0±0.50	6.6±0.30	3.0 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL0640AT	7.0±0.50	6.6±0.30	4.0 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL0650AT	7.0±0.50	6.6±0.30	5.0 Max.	3.0±0.30	1.6±0.30		3.5 Ref	2.4 Ref	2.6 Ref
MPL1040AT	11.0±0.80	10.2±0.50	4.0 Max.	3.0±0.50	2.0±0.50		4.1 Ref	3.5 Ref	6.0 Ref
MPL1050AT	11.0±0.80	10.2±0.50	5.0 Max.	3.0±0.50	2.0±0.50		4.1 Ref	3.5 Ref	6.0 Ref
MPL1235AT	13.5±1.00	12.8±0.50	3.5 Max.	3.8±0.50	2.5±0.50		5.0 Ref	3.0 Ref	7.8 Ref
MPL1250AT	13.5±1.00	12.8±0.50	5.0 Max.	3.8±0.50	2.5±0.50		5.0 Ref	3.0 Ref	7.8 Ref
MPL1265AT	13.5±1.00	12.8±0.50	6.5 Max.	3.8±0.50	2.5±0.50		5.0 Ref	3.0 Ref	7.8 Ref

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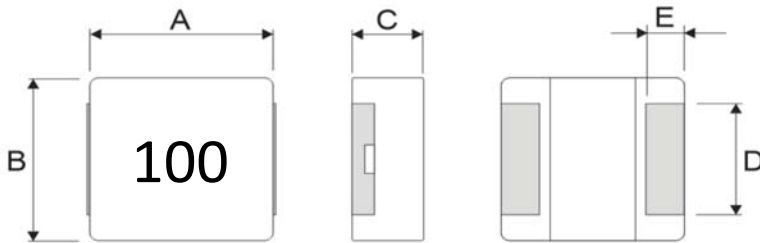
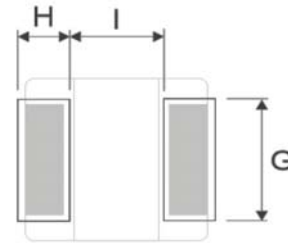
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Series name	Dimensions(LxWxH)		Internal code
MPL	0415	4.49*4.06*1.5mm	AT=Carbonyl Iron Particle
	1770	17.5*17.0*7.0mm	

Inductance		Tolerance	
1R0	1 μH	M	20%
101	100 μH		

⊕ Shapes And Dimensions

⊕ Recommended PCB Pattern


Part No.	Dimensions(mm)								
	A	B	C	D	E		G	H	I
MPL1770AT	17.5±1.00	17.0±0.50	7.0 Max.	12.0±0.50	2.5±0.50		13.0 Ref	3.8 Ref	12.4 Ref

⊕ Equivalent Circuit Schematic :

⊕ Material List :

No.	Location	Material
1	Core	Carbonyl Iron Particle
2	Wire	G2Polyurethane enameled or Equivalent
3	Hoop	C5191H or Equivalent
4	Ink	Black

1.Operating temperature -40°C ~ +125°C

2.Storage conditions -40°C ~ +125°C

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0420AT-R10N	0.1 \pm 30%	33	35	13	14	4.5	3.8	100KHz/1V
MPL0420AT-R22M	0.22 \pm 20%	22	24	12	13	7	5	100KHz/1V
MPL0420AT-R33M	0.33 \pm 20%	16	18	9.5	10	10.5	8.2	100KHz/1V
MPL0420AT-R47M	0.47 \pm 20%	11	12	7.5	8	14	11	100KHz/1V
MPL0420AT-R56M	0.56 \pm 20%	9.5	10	6.5	7	18	14	100KHz/1V
MPL0420AT-R68M	0.68 \pm 20%	9.5	10	6.5	7	20	15	100KHz/1V
MPL0420AT-1R0M	1 \pm 20%	8	8.5	4.5	5	27	22	100KHz/1V
MPL0420AT-1R5M	1.5 \pm 20%	6.5	7	4	4.5	33	30	100KHz/1V
MPL0420AT-2R2M	2.2 \pm 20%	6.5	7	3.5	4	58	45	100KHz/1V
MPL0420AT-3R3M	3.3 \pm 20%	3.5	4	3.3	3.5	87	78	100KHz/1V
MPL0420AT-4R7M	4.7 \pm 20%	3.5	4	2	2.2	140	105	100KHz/1V
MPL0420AT-6R8M	6.8 \pm 20%	2.8	3	1.9	2.1	175	120	100KHz/1V
MPL0420AT-8R2M	8.2 \pm 20%	2.3	2.5	1.6	1.8	200	170	100KHz/1V
MPL0420AT-100M	10 \pm 20%	2.1	2.3	1.4	1.6	200	170	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0518AT-R20M	0.2 \pm 20%	23	25	13	14	4.1	3.6	100KHz/1V
MPL0518AT-R22M	0.22 \pm 20%	20	22	12	13	5	4.2	100KHz/1V
MPL0518AT-R33M	0.33 \pm 20%	14	15	10	11	8.6	7.5	100KHz/1V
MPL0518AT-R47M	0.47 \pm 20%	13	14	9.5	10	11.3	9.8	100KHz/1V
MPL0518AT-R56M	0.56 \pm 20%	12.5	13.5	9	9.5	13	11	100KHz/1V
MPL0518AT-R68M	0.68 \pm 20%	12	13	8.5	9	14.3	12.4	100KHz/1V
MPL0518AT-1R0M	1 \pm 20%	9.5	10	6.3	6.8	21	18.2	100KHz/1V
MPL0518AT-1R5M	1.5 \pm 20%	8.5	9	5.5	6	30	26	100KHz/1V
MPL0518AT-2R2M	2.2 \pm 20%	7	7.5	4	4.5	48	42	100KHz/1V
MPL0518AT-3R3M	3.3 \pm 20%	4.5	5	3.3	3.5	69	60	100KHz/1V
MPL0518AT-4R7M	4.7 \pm 20%	4	4.5	2.8	3	98	85	100KHz/1V
MPL0518AT-5R6M	5.6 \pm 20%	3.5	4	2.3	2.5	127	110	100KHz/1V
MPL0518AT-6R8M	6.8 \pm 20%	3.2	3.5	2.2	2.4	137	118	100KHz/1V
MPL0518AT-8R2M	8.2 \pm 20%	2.8	3	2.1	2.3	165	143	100KHz/1V
MPL0518AT-100M	10 \pm 20%	2.6	2.8	2.1	2.3	190	165	100KHz/1V
MPL0518AT-150M	15 \pm 20%	2.1	2.3	1.5	1.7	318	275	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0520AT-R22M	0.22 \pm 20%	15.5	16.5	12	13	6	4.6	100KHz/1V
MPL0520AT-R33M	0.33 \pm 20%	14	15	11	12	9	7.4	100KHz/1V
MPL0520AT-R47M	0.47 \pm 20%	11	12	10.5	11.5	9	7.4	100KHz/1V
MPL0520AT-1R0M	1 \pm 20%	7.5	8	5.5	6	20	15	100KHz/1V
MPL0520AT-1R5M	1.5 \pm 20%	6.5	7	4.5	5	26	22	100KHz/1V
MPL0520AT-2R2M	2.2 \pm 20%	5.5	6	3.5	4	50	42	100KHz/1V
MPL0520AT-3R3M	3.3 \pm 20%	4.5	5	3.3	3.5	70	58	100KHz/1V
MPL0520AT-4R7M	4.7 \pm 20%	3.5	4	3	3.2	95	85	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0520AT-6R8M	6.8 \pm 20%	2.6	2.8	2.3	2.5	150	120	100KHz/1V
MPL0520AT-100M	10 \pm 20%	1.8	2	1.6	1.8	190	170	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0530AT-R10N	0.1 \pm 30%	25	27	21	23	3	2.5	100KHz/1V
MPL0530AT-R20N	0.2 \pm 30%	23	25	15	16	3.2	2.6	100KHz/1V
MPL0530AT-R22M	0.22 \pm 20%	19	21	14.5	15.5	4.4	3.7	100KHz/1V
MPL0530AT-R33M	0.33 \pm 20%	17	18	13	14	5	4.3	100KHz/1V
MPL0530AT-R47M	0.47 \pm 20%	15	16	11	12	7.4	6.4	100KHz/1V
MPL0530AT-R68M	0.68 \pm 20%	13	14	8	8.5	12	10	100KHz/1V
MPL0530AT-1R0M	1 \pm 20%	10	11	6.5	7	14	13	100KHz/1V
MPL0530AT-1R2M	1.2 \pm 20%	10	11	6	6.5	16	14	100KHz/1V
MPL0530AT-1R5M	1.5 \pm 20%	9.5	10	5.5	6	25	16	100KHz/1V
MPL0530AT-2R2M	2.2 \pm 20%	8.5	9	5	5.5	35	25	100KHz/1V
MPL0530AT-3R3M	3.3 \pm 20%	7.5	8	4.5	5	38	32	100KHz/1V
MPL0530AT-3R6M	3.6 \pm 20%	6.5	7	4.4	4.9	54	46	100KHz/1V
MPL0530AT-4R7M	4.7 \pm 20%	5.5	6	4.1	4.6	57	50	100KHz/1V
MPL0530AT-5R6M	5.6 \pm 20%	4	4.5	3.8	4.3	63	55	100KHz/1V
MPL0530AT-6R8M	6.8 \pm 20%	3.8	4.3	3.5	4	76	68	100KHz/1V
MPL0530AT-100M	10 \pm 20%	3.3	3.5	2.6	2.8	128	110	100KHz/1V
MPL0530AT-150M	15 \pm 20%	2.4	2.6	1.9	2.1	190	165	100KHz/1V
MPL0530AT-180M	18 \pm 20%	2.1	2.3	1.8	2	230	195	100KHz/1V
MPL0530AT-220M	22 \pm 20%	1.5	1.7	1.7	1.9	250	220	100KHz/1V
MPL0530AT-330M	33 \pm 20%	1.4	1.6	1.4	1.6	440	380	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0618AT-R15N	0.15 \pm 30%	28	30	15	16	2.6	2.2	100KHz/1V
MPL0618AT-R18N	0.18 \pm 30%	27	29	14	15	3	2.5	100KHz/1V
MPL0618AT-R22M	0.22 \pm 20%	22	24	13	14	3	2.5	100KHz/1V
MPL0618AT-R33M	0.33 \pm 20%	18	19	11	12	5.8	4.8	100KHz/1V
MPL0618AT-R47M	0.47 \pm 20%	15	16	9.5	10	7.4	6.4	100KHz/1V
MPL0618AT-R56M	0.56 \pm 20%	14	15	9	9.5	10	8.5	100KHz/1V
MPL0618AT-R68M	0.68 \pm 20%	14	15	8.5	9	11	9.5	100KHz/1V
MPL0618AT-R82M	0.82 \pm 20%	13	14	7.4	7.9	14	11.5	100KHz/1V
MPL0618AT-1R0M	1 \pm 20%	11	12	6	6.5	17	14.5	100KHz/1V
MPL0618AT-1R2M	1.2 \pm 20%	10	11	5.5	6	24	20	100KHz/1V
MPL0618AT-1R5M	1.5 \pm 20%	10	11	5	5.5	25.2	21	100KHz/1V
MPL0618AT-2R2M	2.2 \pm 20%	9.5	10	5	5.5	35	31	100KHz/1V
MPL0618AT-3R3M	3.3 \pm 20%	7.5	8	4	4.5	46	40	100KHz/1V
MPL0618AT-4R7M	4.7 \pm 20%	5.5	6	3.4	3.6	76	68	100KHz/1V
MPL0618AT-5R6M	5.6 \pm 20%	4.5	5	2.9	3.1	86	78	100KHz/1V
MPL0618AT-6R8M	6.8 \pm 20%	4	4.5	2.4	2.6	104	93	100KHz/1V
MPL0618AT-8R2M	8.2 \pm 20%	3.6	3.8	2	2.2	140	123	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0618AT-100M	10 \pm 20%	2.9	3.1	1.8	2	160	143	100KHz/1V
MPL0618AT-150M	15 \pm 20%	2.5	2.7	1.5	1.7	280	240	100KHz/1V
MPL0618AT-220M	22 \pm 20%	1.9	2.1	1.3	1.5	360	300	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0620AT-R10N	0.1 \pm 30%	38	40	19	21	2.4	2	100KHz/1V
MPL0620AT-R15N	0.15 \pm 30%	37	39	17	18	2.7	2.3	100KHz/1V
MPL0620AT-R16N	0.16 \pm 30%	36	38	17	18	2.7	2.3	100KHz/1V
MPL0620AT-R18N	0.18 \pm 30%	34	36	17	18	2.9	2.4	100KHz/1V
MPL0620AT-R20N	0.2 \pm 30%	33	35	17	18	3	2.5	100KHz/1V
MPL0620AT-R22N	0.22 \pm 30%	30	32	14	15	4	3.5	100KHz/1V
MPL0620AT-R33M	0.33 \pm 20%	23	25	13	14	5	4.5	100KHz/1V
MPL0620AT-R47M	0.47 \pm 20%	19	20	10.7	11.7	8.3	7.1	100KHz/1V
MPL0620AT-R56M	0.56 \pm 20%	17	18	10	11	9.3	7.9	100KHz/1V
MPL0620AT-R68M	0.68 \pm 20%	15	16	9.5	10.5	10	8.3	100KHz/1V
MPL0620AT-1R0M	1 \pm 20%	13	14	7.5	8	18	16.5	100KHz/1V
MPL0620AT-1R2M	1.2 \pm 20%	12	13	7	7.5	23	19	100KHz/1V
MPL0620AT-1R5M	1.5 \pm 20%	11	12	6.5	7	27	23	100KHz/1V
MPL0620AT-2R2M	2.2 \pm 20%	9.5	10	5.5	6	37	32	100KHz/1V
MPL0620AT-3R3M	3.3 \pm 20%	7.5	8	4.5	5	48	43	100KHz/1V
MPL0620AT-4R7M	4.7 \pm 20%	6.5	7	4	4.5	60	53	100KHz/1V
MPL0620AT-5R6M	5.6 \pm 20%	5.5	6	3.5	4	68	59	100KHz/1V
MPL0620AT-6R8M	6.8 \pm 20%	5	5.5	3.5	4	73	63	100KHz/1V
MPL0620AT-8R2M	8.2 \pm 20%	4.5	5	3	3.2	116	101	100KHz/1V
MPL0620AT-100M	10 \pm 20%	3.5	4	2.6	2.8	154	134	100KHz/1V
MPL0620AT-150M	15 \pm 20%	3.1	3.3	1.9	2.1	210	190	100KHz/1V
MPL0620AT-220M	22 \pm 20%	2.3	2.5	1.3	1.5	280	236	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0624AT-R10N	0.1 \pm 30%	67	70	28	30	1.7	1.4	100KHz/1V
MPL0624AT-R15N	0.15 \pm 30%	43	45	28	30	2.3	1.8	100KHz/1V
MPL0624AT-R20M	0.2 \pm 20%	38	40	21	23	2.8	1.9	100KHz/1V
MPL0624AT-R22M	0.22 \pm 20%	32	34	19	21	3.2	2	100KHz/1V
MPL0624AT-R33M	0.33 \pm 20%	28	30	17	18	4.4	3.6	100KHz/1V
MPL0624AT-R36M	0.36 \pm 20%	27	29	16	17	4.6	3.8	100KHz/1V
MPL0624AT-R47M	0.47 \pm 20%	24	26	14	15	5.1	4.8	100KHz/1V
MPL0624AT-R56M	0.56 \pm 20%	22	24	12	13	6.5	5.5	100KHz/1V
MPL0624AT-R60M	0.6 \pm 20%	20	22	12	13	6.9	5.7	100KHz/1V
MPL0624AT-R68M	0.68 \pm 20%	19	21	12	13	7.2	6.4	100KHz/1V
MPL0624AT-R82M	0.82 \pm 20%	16	17	10	11	9.5	8	100KHz/1V
MPL0624AT-1R0M	1 \pm 20%	15	16	10	11	13.5	10.5	100KHz/1V
MPL0624AT-1R5M	1.5 \pm 20%	14	15	8.5	9	20	17	100KHz/1V
MPL0624AT-2R2M	2.2 \pm 20%	13	14	6.5	7	28	23	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0624AT-3R3M	3.3 \pm 20%	9.5	10	5.5	6	39	34	100KHz/1V
MPL0624AT-4R7M	4.7 \pm 20%	8.5	9	5	5.5	50	41	100KHz/1V
MPL0624AT-5R6M	5.6 \pm 20%	7.5	8	4.5	5	62	56	100KHz/1V
MPL0624AT-6R8M	6.8 \pm 20%	6.5	7	3.5	4	72	65	100KHz/1V
MPL0624AT-8R2M	8.2 \pm 20%	5.5	6	3.4	3.6	95	81	100KHz/1V
MPL0624AT-100M	10 \pm 20%	4.5	5	3	3.2	101	92	100KHz/1V
MPL0624AT-150M	15 \pm 20%	3.3	3.5	2.3	2.5	180	150	100KHz/1V
MPL0624AT-220M	22 \pm 20%	2.8	3	1.6	1.8	215	185	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0630AT-R10M	0.1 \pm 20%	57	60	30.5	32.5	1.5	1.3	100KHz/1V
MPL0630AT-R15M	0.15 \pm 20%	49	52	28	30	2.5	2	100KHz/1V
MPL0630AT-R20M	0.2 \pm 20%	39	41	22	24	2.7	2.2	100KHz/1V
MPL0630AT-R22M	0.22 \pm 20%	38	40	21	23	3.2	2.5	100KHz/1V
MPL0630AT-R33M	0.33 \pm 20%	28	30	19	20	3.5	3	100KHz/1V
MPL0630AT-R47M	0.47 \pm 20%	24	26	16.5	17.5	5	4.4	100KHz/1V
MPL0630AT-R56M	0.56 \pm 20%	23.5	25.5	15.5	16.5	4.5	3.5	100KHz/1V
MPL0630AT-R68M	0.68 \pm 20%	23	25	14.5	15.5	5.5	5	100KHz/1V
MPL0630AT-R75M	0.75 \pm 20%	22.5	24.5	13	14	5.5	5	100KHz/1V
MPL0630AT-R82M	0.82 \pm 20%	22	24	12	13	8.5	7	100KHz/1V
MPL0630AT-1R0M	1 \pm 20%	20	22	10	11	8.6	7.2	100KHz/1V
MPL0630AT-1R2M	1.2 \pm 20%	19	20	9.5	10	8.6	7.2	100KHz/1V
MPL0630AT-1R5M	1.5 \pm 20%	17	18	8.5	9	15	12.5	100KHz/1V
MPL0630AT-2R0M	2 \pm 20%	13	14	7.7	8.2	20	18	100KHz/1V
MPL0630AT-2R2M	2.2 \pm 20%	13	14	7.5	8	20	18	100KHz/1V
MPL0630AT-2R5M	2.5 \pm 20%	13	14	6.5	7	20	18	100KHz/1V
MPL0630AT-3R3M	3.3 \pm 20%	12.5	13.5	5.5	6	22	18.5	100KHz/1V
MPL0630AT-4R7M	4.7 \pm 20%	9.5	10	5	5.5	33	30	100KHz/1V
MPL0630AT-6R8M	6.8 \pm 20%	7.5	8	4	4.5	60	54	100KHz/1V
MPL0630AT-8R2M	8.2 \pm 20%	7.5	8	3.5	4	66	55	100KHz/1V
MPL0630AT-100M	10 \pm 20%	6.5	7	2.8	3	100	90	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0640AT-R12N	0.12 \pm 30%	61	64	30	32	1	0.7	100KHz/1V
MPL0640AT-R15N	0.15 \pm 30%	52	55	28	30	1.2	0.9	100KHz/1V
MPL0640AT-R22M	0.22 \pm 20%	32	34	23	25	2.1	1.9	100KHz/1V
MPL0640AT-R33M	0.33 \pm 20%	32	34	23	25	2.6	2	100KHz/1V
MPL0640AT-R36M	0.36 \pm 20%	29	31	23	25	3.1	2.7	100KHz/1V
MPL0640AT-R47M	0.47 \pm 20%	26	28	21	23	3.4	3	100KHz/1V
MPL0640AT-R56M	0.56 \pm 20%	24	26	19	20	4.3	3.8	100KHz/1V
MPL0640AT-R68M	0.68 \pm 20%	22	24	15	16	4.5	4.1	100KHz/1V
MPL0640AT-1R0M	1 \pm 20%	20	22	13	14	8	6.8	100KHz/1V
MPL0640AT-1R5M	1.5 \pm 20%	19	20	11	12	12	10	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0640AT-2R2M	2.2 \pm 20%	13	14	8.5	9	14	11.5	100KHz/1V
MPL0640AT-3R3M	3.3 \pm 20%	11	12	7.5	8	27	24	100KHz/1V
MPL0640AT-4R7M	4.7 \pm 20%	10	11	5.5	6	32.5	28	100KHz/1V
MPL0640AT-5R6M	5.6 \pm 20%	8.5	9	4.5	5	38	33	100KHz/1V
MPL0640AT-6R8M	6.8 \pm 20%	8	8.5	4	4.5	50	44	100KHz/1V
MPL0640AT-8R2M	8.2 \pm 20%	7.5	8	4	4.5	64	55	100KHz/1V
MPL0640AT-100M	10 \pm 20%	6.5	7	3.5	4	72	64	100KHz/1V
MPL0640AT-150M	15 \pm 20%	3.3	3.5	2.8	3	90	80	100KHz/1V
MPL0640AT-220M	22 \pm 20%	3.3	3.5	2.3	2.5	145	120	100KHz/1V
MPL0640AT-330M	33 \pm 20%	3	3.2	1.6	1.8	210	180	100KHz/1V
MPL0640AT-470M	47 \pm 20%	2.3	2.5	1.6	1.8	350	295	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL0650AT-R10N	0.1 \pm 30%	62	65	30	32	0.8	0.7	100KHz/1V
MPL0650AT-R11N	0.11 \pm 30%	62	65	30	32	0.8	0.7	100KHz/1V
MPL0650AT-R15N	0.15 \pm 30%	48	50	28	30	1.7	1.3	100KHz/1V
MPL0650AT-R22M	0.22 \pm 20%	33	35	23	25	1.9	1.6	100KHz/1V
MPL0650AT-R33M	0.33 \pm 20%	30	32	23	25	3	2.5	100KHz/1V
MPL0650AT-R40M	0.4 \pm 20%	29	31	21	23	3.7	3.1	100KHz/1V
MPL0650AT-R47M	0.47 \pm 20%	28	30	20	22	3.9	3.5	100KHz/1V
MPL0650AT-R56M	0.56 \pm 20%	25	27	19	20	4.2	3.6	100KHz/1V
MPL0650AT-R60M	0.6 \pm 20%	23	25	18	19	4.3	3.8	100KHz/1V
MPL0650AT-R68M	0.68 \pm 20%	22	24	17	18	4.5	4	100KHz/1V
MPL0650AT-R82M	0.82 \pm 20%	20	22	15.5	16.5	4.9	4.6	100KHz/1V
MPL0650AT-1R0M	1 \pm 20%	19	20	14	15	6.5	6.1	100KHz/1V
MPL0650AT-1R2M	1.2 \pm 20%	17	18	13	14	7.5	6.7	100KHz/1V
MPL0650AT-1R5M	1.5 \pm 20%	15.5	16.5	11	12	9	8.6	100KHz/1V
MPL0650AT-1R8M	1.8 \pm 20%	14	15	11	12	11	9.5	100KHz/1V
MPL0650AT-2R2M	2.2 \pm 20%	13	14	9.5	10	12	11.2	100KHz/1V
MPL0650AT-3R3M	3.3 \pm 20%	11	12	7.5	8	20.9	19	100KHz/1V
MPL0650AT-4R7M	4.7 \pm 20%	9.5	10	6	6.5	30.8	28	100KHz/1V
MPL0650AT-4R9M	4.9 \pm 20%	9	9.5	5.8	6.3	38	32	100KHz/1V
MPL0650AT-5R6M	5.6 \pm 20%	8.5	9	5.5	6	49	43.5	100KHz/1V
MPL0650AT-6R8M	6.8 \pm 20%	8	8.5	5	5.5	51.5	46	100KHz/1V
MPL0650AT-8R2M	8.2 \pm 20%	7.5	8	4.5	5	63	56	100KHz/1V
MPL0650AT-100M	10 \pm 20%	7	7.5	3.5	4	69	60	100KHz/1V
MPL0650AT-120M	12 \pm 20%	6.2	6.7	3.6	3.8	80	68	100KHz/1V
MPL0650AT-150M	15 \pm 20%	5.5	6	3.3	3.5	92	81	100KHz/1V
MPL0650AT-220M	22 \pm 20%	5	5.5	2.3	2.5	170	140	100KHz/1V
MPL0650AT-330M	33 \pm 20%	3.3	3.5	1.8	2	200	173	100KHz/1V
MPL0650AT-420M	42 \pm 20%	2.6	2.8	1.8	2	245	212	100KHz/1V
MPL0650AT-470M	47 \pm 20%	2.5	2.7	1.7	1.9	330	290	100KHz/1V
MPL0650AT-560M	56 \pm 20%	1.9	2.1	1.4	1.6	396	342	100KHz/1V
MPL0650AT-680M	68 \pm 20%	1.8	2	1	1.2	445	386	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1040AT-R22M	0.22 \pm 20%	57	60	33	35	1	0.8	100KHz/1V
MPL1040AT-R27M	0.27 \pm 20%	57	60	31	33	1	0.8	100KHz/1V
MPL1040AT-R36M	0.36 \pm 20%	57	60	29	31	1.2	1.1	100KHz/1V
MPL1040AT-R39M	0.39 \pm 20%	57	60	28	30	1.3	1.1	100KHz/1V
MPL1040AT-R45M	0.45 \pm 20%	43	45	27	29	1.5	1.3	100KHz/1V
MPL1040AT-R56M	0.56 \pm 20%	38	40	23	25	1.8	1.6	100KHz/1V
MPL1040AT-1R0M	1 \pm 20%	34	36	17	18	3.3	3	100KHz/1V
MPL1040AT-1R5M	1.5 \pm 20%	31	33	15	16	4.6	4	100KHz/1V
MPL1040AT-2R2M	2.2 \pm 20%	25	27	11	12	7	6.5	100KHz/1V
MPL1040AT-3R3M	3.3 \pm 20%	19	20	10	11	11.8	10.8	100KHz/1V
MPL1040AT-4R7M	4.7 \pm 20%	16	17	9.5	10	15.5	15	100KHz/1V
MPL1040AT-6R8M	6.8 \pm 20%	12.5	13.5	8	8.5	23.3	17.5	100KHz/1V
MPL1040AT-8R2M	8.2 \pm 20%	11.5	12.5	7.5	8	24.5	20	100KHz/1V
MPL1040AT-100M	10 \pm 20%	11	12	7	7.5	30	27	100KHz/1V
MPL1040AT-150M	15 \pm 20%	9.5	10	5.8	6.3	45	40	100KHz/1V
MPL1040AT-220M	22 \pm 20%	6.5	7	4.5	5	74	63	100KHz/1V
MPL1040AT-330M	33 \pm 20%	4.5	5	3.3	3.5	112	92	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1050AT-R22M	0.22 \pm 20%	67	70	43	45	0.6	0.5	100KHz/1V
MPL1050AT-R30M	0.3 \pm 20%	62	65	36	38	0.8	0.6	100KHz/1V
MPL1050AT-R56M	0.56 \pm 20%	41	43	24.5	26.5	1.5	1.3	100KHz/1V
MPL1050AT-R90M	0.9 \pm 20%	30	32	23	25	3	2.2	100KHz/1V
MPL1050AT-1R0M	1 \pm 20%	28	30	20	22	3.5	2.8	100KHz/1V
MPL1050AT-1R2M	1.2 \pm 20%	26	28	19	20	3.5	2.9	100KHz/1V
MPL1050AT-1R3M	1.3 \pm 20%	26	28	19	20	3.7	3.2	100KHz/1V
MPL1050AT-1R5M	1.5 \pm 20%	25	27	18	19	4.1	3.5	100KHz/1V
MPL1050AT-1R8M	1.8 \pm 20%	23.5	25.5	16.5	17.5	4.7	3.7	100KHz/1V
MPL1050AT-2R2M	2.2 \pm 20%	22	24	15	16	6	5.4	100KHz/1V
MPL1050AT-3R3M	3.3 \pm 20%	20	22	13	14	10.4	9	100KHz/1V
MPL1050AT-4R7M	4.7 \pm 20%	18	19	12	13	12.5	10	100KHz/1V
MPL1050AT-5R0M	5 \pm 20%	17	18	11	12	15	12.2	100KHz/1V
MPL1050AT-5R6M	5.6 \pm 20%	15	16	9.5	10	16.8	14	100KHz/1V
MPL1050AT-6R8M	6.8 \pm 20%	14	15	9	9.5	21	16.5	100KHz/1V
MPL1050AT-8R2M	8.2 \pm 20%	13.5	14.5	8.5	9	24	18.5	100KHz/1V
MPL1050AT-100M	10 \pm 20%	12.5	13.5	7.5	8	29	25	100KHz/1V
MPL1050AT-120M	12 \pm 20%	9.5	10	5.5	6	35	30	100KHz/1V
MPL1050AT-150M	15 \pm 20%	9	9.5	5	5.5	45	37	100KHz/1V
MPL1050AT-220M	22 \pm 20%	8.5	9	4.5	5	60	50	100KHz/1V
MPL1050AT-240M	24 \pm 20%	7.2	7.7	4.1	4.6	70.8	59	100KHz/1V
MPL1050AT-330M	33 \pm 20%	7	7.5	3.8	4.3	92	80	100KHz/1V
MPL1050AT-470M	47 \pm 20%	6	6.5	3.6	3.8	145	125	100KHz/1V
MPL1050AT-680M	68 \pm 20%	3.5	4	2.3	2.5	205	176	100KHz/1V
MPL1050AT-101M	100 \pm 20%	2.8	3	1.8	2	380	315	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1235AT-1R5M	1.5 \pm 20%	33	35	18	19	5.5	4.8	100KHz/1V
MPL1235AT-1R8M	1.8 \pm 20%	28	30	16	17	7	5.2	100KHz/1V
MPL1235AT-2R2M	2.2 \pm 20%	27	29	15	16	8	6.3	100KHz/1V
MPL1235AT-3R3M	3.3 \pm 20%	25	27	11	12	13.5	11	100KHz/1V
MPL1235AT-4R7M	4.7 \pm 20%	22	24	9.5	10	18.5	15.3	100KHz/1V
MPL1235AT-5R6M	5.6 \pm 20%	18	19	9	9.5	22	18	100KHz/1V
MPL1235AT-6R8M	6.8 \pm 20%	17	18	8.5	9	24	20	100KHz/1V
MPL1235AT-8R2M	8.2 \pm 20%	15	16	8	8.5	28	23	100KHz/1V
MPL1235AT-100M	10 \pm 20%	13	14	7	7.5	34	29	100KHz/1V
MPL1235AT-150M	15 \pm 20%	9.5	10	6	6.5	65	55	100KHz/1V
MPL1235AT-220M	22 \pm 20%	6.5	7	4	4.5	99	83	100KHz/1V
MPL1235AT-330M	33 \pm 20%	5.5	6	3.3	3.5	160	132	100KHz/1V
MPL1235AT-470M	47 \pm 20%	5	5.5	2.8	3	218	181	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1250AT-R15M	0.15 \pm 20%	105	110	50	53	0.6	0.5	100KHz/1V
MPL1250AT-R22M	0.22 \pm 20%	105	110	49	52	0.7	0.5	100KHz/1V
MPL1250AT-R33M	0.33 \pm 20%	72	75	40	42	1	0.8	100KHz/1V
MPL1250AT-R36M	0.36 \pm 20%	67	70	40	42	1	0.8	100KHz/1V
MPL1250AT-R40M	0.4 \pm 20%	61	64	39	41	1	0.8	100KHz/1V
MPL1250AT-R47M	0.47 \pm 20%	57	60	36	38	1.3	1.1	100KHz/1V
MPL1250AT-R56M	0.56 \pm 20%	52	55	34	36	1.3	1.1	100KHz/1V
MPL1250AT-R68M	0.68 \pm 20%	51	54	32	34	1.7	1.4	100KHz/1V
MPL1250AT-R82M	0.82 \pm 20%	49	52	29	31	2.1	1.7	100KHz/1V
MPL1250AT-1R0M	1 \pm 20%	48	50	27	29	2.5	1.8	100KHz/1V
MPL1250AT-1R2M	1.2 \pm 20%	45	47	26	28	2.5	1.9	100KHz/1V
MPL1250AT-1R5M	1.5 \pm 20%	45	47	19	21	4.1	2.7	100KHz/1V
MPL1250AT-2R2M	2.2 \pm 20%	35	37	19	21	5.5	4.5	100KHz/1V
MPL1250AT-3R3M	3.3 \pm 20%	30	32	14	15	8.4	7.1	100KHz/1V
MPL1250AT-4R7M	4.7 \pm 20%	25	27	11	12	15	11.4	100KHz/1V
MPL1250AT-6R8M	6.8 \pm 20%	19	20	10	11	18.5	14.5	100KHz/1V
MPL1250AT-8R2M	8.2 \pm 20%	17	18	9	9.5	22.5	19.8	100KHz/1V
MPL1250AT-100M	10 \pm 20%	16	17	8.5	9	25.5	22	100KHz/1V
MPL1250AT-150M	15 \pm 20%	12	13	7.7	8.2	38	32	100KHz/1V
MPL1250AT-220M	22 \pm 20%	9.5	10	6	6.5	58	50	100KHz/1V
MPL1250AT-330M	33 \pm 20%	9.5	10	4.5	5	65	55	100KHz/1V
MPL1250AT-470M	47 \pm 20%	5.5	6	3.5	4	100	85	100KHz/1V
MPL1250AT-680M	68 \pm 20%	4.5	5	3.3	3.5	180	154	100KHz/1V
MPL1250AT-101M	100 \pm 20%	4	4.5	2.8	3	270	243	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1265AT-R15M	0.15 \pm 20%	113	118	52	55	0.6	0.5	100KHz/1V
MPL1265AT-R22M	0.22 \pm 20%	107	112	50	53	0.6	0.5	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1265AT-R30M	0.3 \pm 20%	69	72	46	48	0.7	0.6	100KHz/1V
MPL1265AT-R33M	0.33 \pm 20%	65	68	44	46	0.8	0.7	100KHz/1V
MPL1265AT-R36M	0.36 \pm 20%	63	66	43	45	0.8	0.7	100KHz/1V
MPL1265AT-R40M	0.4 \pm 20%	61	64	42	44	1	0.8	100KHz/1V
MPL1265AT-R47M	0.47 \pm 20%	60	63	39	41	1.2	0.9	100KHz/1V
MPL1265AT-R50M	0.5 \pm 20%	55	60	38	40	1.3	0.9	100KHz/1V
MPL1265AT-R56M	0.56 \pm 20%	55	58	35	37	1.3	1.1	100KHz/1V
MPL1265AT-R68M	0.68 \pm 20%	52	55	33	35	1.5	1.3	100KHz/1V
MPL1265AT-R82M	0.82 \pm 20%	48	50	31	33	1.9	1.5	100KHz/1V
MPL1265AT-1R0M	1 \pm 20%	46	48	28	30	2.3	1.7	100KHz/1V
MPL1265AT-1R2M	1.2 \pm 20%	45	47	26	28	2.4	1.9	100KHz/1V
MPL1265AT-1R5M	1.5 \pm 20%	43	45	25	27	3	2.5	100KHz/1V
MPL1265AT-1R8M	1.8 \pm 20%	38	40	22	24	4	3.6	100KHz/1V
MPL1265AT-2R2M	2.2 \pm 20%	35	37	20	22	4.2	3.8	100KHz/1V
MPL1265AT-2R7M	2.7 \pm 20%	30	32	19	20	5.5	4.3	100KHz/1V
MPL1265AT-3R3M	3.3 \pm 20%	28	30	17	18	6.8	5.7	100KHz/1V
MPL1265AT-4R7M	4.7 \pm 20%	26	28	12.5	13.5	8.4	7	100KHz/1V
MPL1265AT-5R6M	5.6 \pm 20%	21	23	11.5	12.5	10	8.5	100KHz/1V
MPL1265AT-6R8M	6.8 \pm 20%	17	18	10.5	11.5	11.5	9.5	100KHz/1V
MPL1265AT-8R2M	8.2 \pm 20%	15	16	9.5	10.5	15.5	12	100KHz/1V
MPL1265AT-100M	10 \pm 20%	14.5	15.5	9.5	10	16.5	13.2	100KHz/1V
MPL1265AT-130M	13 \pm 20%	12	13	8.5	9	24	21	100KHz/1V
MPL1265AT-150M	15 \pm 20%	12	13	8.5	9	28	23.2	100KHz/1V
MPL1265AT-220M	22 \pm 20%	11	12	8.5	9	37	32.5	100KHz/1V
MPL1265AT-330M	33 \pm 20%	10	11	7.5	8	58	48	100KHz/1V
MPL1265AT-470M	47 \pm 20%	9	9.5	6	6.5	90	76	100KHz/1V
MPL1265AT-680M	68 \pm 20%	7.3	7.8	4.3	4.8	130	110	100KHz/1V
MPL1265AT-101M	100 \pm 20%	5	5.5	3.7	4.2	165	145	100KHz/1V

⊕ Electrical Characteristics :

Part No.	Inductance (μ H)	Isat (A)		Irms (A)		DCR (m Ω)		Test Frequency
		Max	Typ	Max	Typ	Max	Typ	
MPL1770AT-1R0M	1 \pm 20%	67	70	38	40	1.5	1.3	100KHz/1V
MPL1770AT-1R5M	1.5 \pm 20%	49	52	33	35	2.5	1.8	100KHz/1V
MPL1770AT-2R2M	2.2 \pm 20%	45	47	28	30	3	2	100KHz/1V
MPL1770AT-3R3M	3.3 \pm 20%	43	45	23	25	3.5	2.8	100KHz/1V
MPL1770AT-4R7M	4.7 \pm 20%	38	40	20	22	5	4.2	100KHz/1V
MPL1770AT-6R8M	6.8 \pm 20%	33	35	18	19	7.5	6.5	100KHz/1V
MPL1770AT-100M	10 \pm 20%	30	32	15.5	16.5	13	9	100KHz/1V
MPL1770AT-150M	15 \pm 20%	21	23	12	13	18	14.5	100KHz/1V
MPL1770AT-220M	22 \pm 20%	17	18	11	12	25	20.5	100KHz/1V
MPL1770AT-330M	33 \pm 20%	14	15	9.7	10.7	42	30	100KHz/1V
MPL1770AT-470M	47 \pm 20%	13	14	8.2	8.7	52	41	100KHz/1V
MPL1770AT-680M	68 \pm 20%	9.5	10	6.5	7	85	50	100KHz/1V

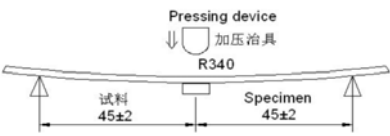
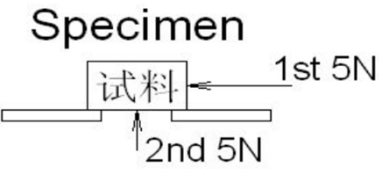
Note : Specifications which provide more details for the proper and safe use of the described product are available upon request. all specifications are subject to change without notice.

Isat : DC Saturation Current that will cause initial inductance to drop approximately 30% max.(at 20°C ambient.)

Irms : DC Current that will cause an approximate Δ T of 40 °C. (at 20°C ambient.)

Test Instrument : LCR(CH1062/HP4284A) \ DCR(TH2511/CH502BC) \ IDC(CH1320) or equivalent.

⊕ General Characteristics

項目 Item	Conditions	Specification
温度特性 Temperature drift	在温度-40 ~ + 125°C之间测试。 To be measured in the range of -40°C to 125°C.	Inductance temperature coefficient 2000 ppm/°C or less
保存温度范围 Storage Temperature	在包装的状态下。 With taping.	- 40°C ~ + 125°C
使用温度范围 Operating Temperature	包括制品的发热温度。 Including self temperature rise.	- 40°C ~ + 125°C
弯曲测试 Bending test	<p>试件焊接在基板上，按箭头方向以大约0.5mm/秒的速度加压，直到基板变形幅度到3mm 保持30 秒。</p> <p>Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.</p>  <p>基板Board: 40*100mm 厚Thickness: 1.0mm</p>	Change from an initial value L : within±10%
固着强度 Adhesion strength	<p>按箭头方向用R0.5 的加压棒在试件中施加一定的静力并保持60±5秒。</p> <p>A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for 60±5s. Measure after removing pressure.</p> 	Change from an initial value L : within±10%

耐振性 Vibration	<p>振动频率10~55~10Hz, 振幅1.5mm, 分X,Y,Z 方向各振动1 小时 (共3 小时) 。</p> <p>The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1 h in each of 3(X,Y,Z) axes.</p>	Change from an initial value L : within±10%
耐冲击性 Mechanical shock	<p>利用橡胶块式落下冲击试验机，分别在3 个互相垂直的方向以981m/S² 的冲击加速度落下。</p> <p>Peak acceleration: 981 m/S² Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen.</p>	Change from an initial value L : within±10%
自然落下试验 Free fall test	<p>试件安装在基板上，并固定在重500 克的盒中，由1 米高自由落体，3 个互相垂直的方向各3 次。</p> <p>The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes.</p>	Change from an initial value L : within±10%
焊锡附着性 Solder ability	<p>试验品的电极深布松香后，在5 ~ 10 秒内焊锡，焊锡槽温度245±5℃，时间：3±0.5 秒。</p> <p>Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at 245±5°C for 3±0.5 seconds.</p>	90%以上的面积要被覆盖。 New solder shall cover 90% minimum of the surface immersed.
耐电压 Dielectric strength	<p>在电极与磁材之间加入直流电压100V 通电时间1 分钟。</p> <p>100V DC shall be applied for 60s between the terminal and the core.</p>	没有损害。 Without damage.

<p>焊锡耐热性 Resistance to soldering heat</p>	<p>试验方法Test method 热风炉焊接Reflow soldering method 预热Preheat 150~180°C 90±30s 峰值温度Peak temp 250(+ 5,-0)°C (230°Cmin , 30±10s) 试验板的厚度0.8mm 上按上面条件通过两次热风炉。</p> <p>The specimen shall be subjected to the reflow process under the above condition 2 times.Test board shall be 0.8mm thick. Base material shall be glass epoxy resin.</p> <p>测定Measurement 常温常湿中放置于1 小时以上测试。 The specimen shall be stored at standard atmospheric conditions for 1 h in prior to the measurement.</p>	<p>Change from an initial value L : within±10%</p>
<p>绝缘抵抗 Insulation resistance</p>	<p>在电极与磁材之间加入直流电压100V。</p> <p>100V DC shall be applied between the terminal and the core.</p>	<p>100mΩ 以上 100mΩ or more.</p>
<p>耐寒性 Low temperature</p>	<p>在温度-40±3°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of -40 ±3°C for 500 ±12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>
<p>耐热性 Dry heat</p>	<p>在温度125±2°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of 125 ± 2°C for 500± 12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>

耐湿性 Dump heat	在温度 $60\pm 2^{\circ}\text{C}$ ·湿度90~95%中放置 500 ± 12 小时后· 常温常湿中放置1小时以上2小时以内测试。 The specimen shall be stored at a temperature of $60\pm 2^{\circ}\text{C}$ with relative humidity of 90 ~ 95% for $500 \pm 2\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within $\pm 10\%$
温度循环 Temperature cycle	以温度 -40°C 中放置30分钟·在 125°C 放置30分钟·中间 转换时间不超过2分钟为一个循环·完成500个循环后· 常温常湿中放置1小时以上2小时以内测试。 The specimen shall be subjected to 500 continuous cycles of temperature change of -40°C for 30 min and 125°C for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.	Change from an initial value L : within $\pm 10\%$

标准状态Standard atmospheric conditions

Unless otherwise specified, the standard range of atmospheric conditions in making measurements and test as follows;

Ambient temperature : 5°C to 35°C , Relative humidity: 45% to 85%, Air pressure: 86kPa to 106kPa

If more strict measurement is required, measurement shall be made within following limits;

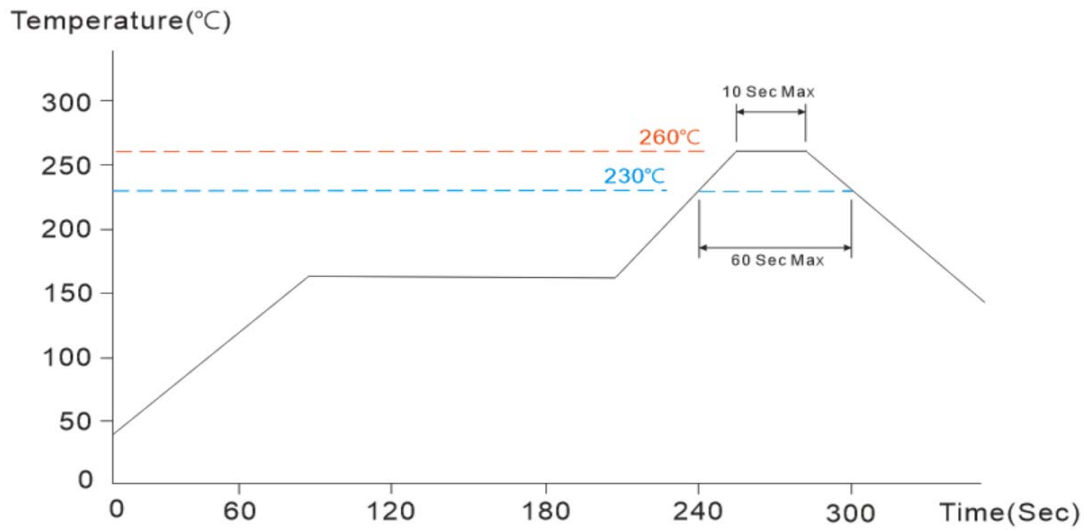
Ambient temperature : $20\pm 2^{\circ}\text{C}$, Relative humidity: $65\pm 5\%$, Air pressure: 86kPa to 106kPa

禁用物质Prohibited Substances

我公司保证我司的产品和生产过程符合“RoHS 规则”·所有产品中使用的材料均是化学物质生产规则中登记的材料。

We confirm that our products and our production process accord with "rule of RoHS". All materials used in this product are registered material under the law concerning the examination and Regulation of Manufacture of Chemical Substances.

⊕ Reflow Soldering Heat Endurance

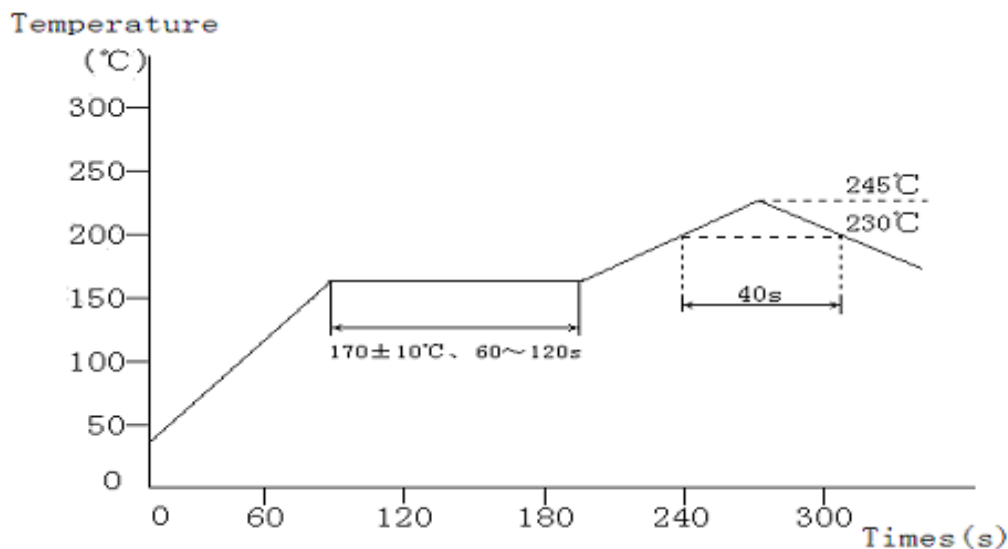


No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

The reflow test profile may vary with the testing instruments.

⊕ Recommended Reflow Conditions

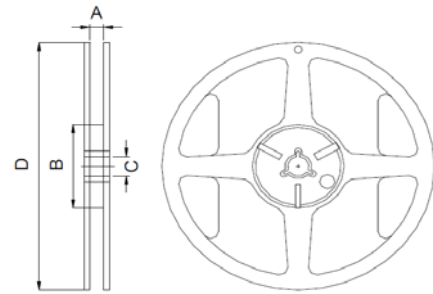
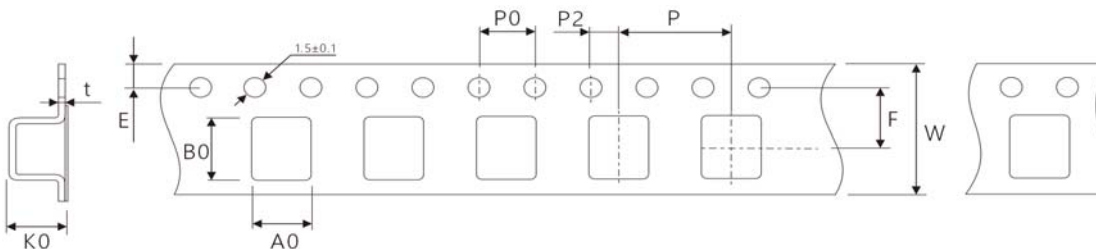


The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.

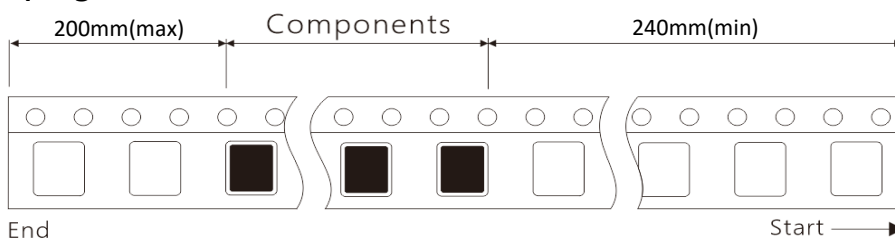
However halogen lamp shall be used, side heat will be beyond range of resistance heat, so we can't recommend it.

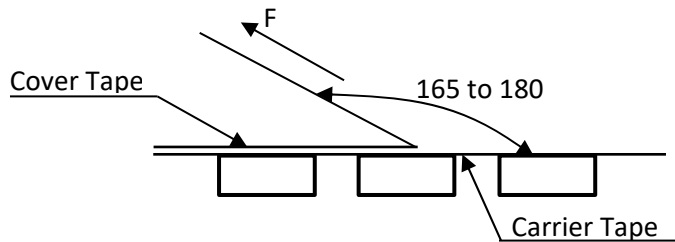
⊕Reel Dimension(m/m)

Item	A	B	C	D
MPL04XX	12.4±1	100±1	13±1	330±1
MPL05XX	16.4±1	100±1	13±1	330±1
MPL06XX	16.4±1	100±1	13±1	330±1
MPL07XX	16.4±1	100±1	13±1	330±1
MPL10XX	24.4±1	100±1	13±1	330±1
MPL12XX	24.4±1	100±1	13±1	330±1
MPL13XX	24.4±1	100±1	13±1	330±1
MPL17XX	32.4±1	100±1	13±1	330±1


⊕Taping Dimension(m/m)


Item	W	Ao	Bo	Ko	E	F	P	P0	P2	t
MPL0420	12±0.3	4.4±0.1	5.2±0.1	2.2±0.1	1.75±0.1	5.5±0.1	8±0.1	4±0.1	2±0.1	0.3±0.05
MPL0518	16±0.3	5.4±0.1	6.2±0.1	2.2±0.1	1.75±0.1	7.5±0.1	8±0.1	4±0.1	2±0.1	0.3±0.05
MPL0520	16±0.3	5.4±0.1	6.2±0.1	2.2±0.1	1.75±0.1	7.5±0.1	8±0.1	4±0.1	2±0.1	0.3±0.05
MPL0530	16±0.3	5.4±0.1	6.2±0.1	3.2±0.1	1.75±0.1	7.5±0.1	8±0.1	4±0.1	2±0.1	0.3±0.05
MPL0618	16±0.3	7.0±0.1	7.8±0.1	2.2±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL0620	16±0.3	7.0±0.1	7.8±0.1	2.2±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL0624	16±0.3	7.0±0.1	7.8±0.1	2.6±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL0630	16±0.3	7.0±0.1	7.8±0.1	3.2±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL0640	16±0.3	7.0±0.1	7.8±0.1	4.2±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL0650	16±0.3	7.0±0.1	7.8±0.1	5.2±0.1	1.75±0.1	7.5±0.1	12±0.1	4±0.1	2±0.1	0.35±0.05
MPL1040	24±0.3	10.6±0.1	12.0±0.1	4.2±0.1	1.75±0.1	11.5±0.1	16±0.1	4±0.1	2±0.1	0.35±0.05
MPL1050	24±0.3	10.6±0.1	12.0±0.1	5.2±0.1	1.75±0.1	11.5±0.1	16±0.1	4±0.1	2±0.1	0.35±0.05
MPL1235	24±0.3	13.0±0.1	14.5±0.1	3.8±0.1	1.75±0.1	11.5±0.1	16±0.1	4±0.1	2±0.1	0.4±0.05
MPL1250	24±0.3	13.0±0.1	14.5±0.1	5.2±0.1	1.75±0.1	11.5±0.1	16±0.1	4±0.1	2±0.1	0.4±0.05
MPL1265	24±0.3	13.0±0.1	14.5±0.1	7.0±0.1	1.75±0.1	11.5±0.1	16±0.1	4±0.1	2±0.1	0.4±0.05
MPL1770	32±0.3	17.3±0.1	18.7±0.1	7.2±0.1	1.75±0.1	14.2±0.1	20±0.1	4±0.1	2±0.1	0.4±0.05

⊕Taping method


⊕ Reel Dimension(m/m)
⊕ Taping Off Force


in the arrow direction under the following conditio

Room Temp (°C)	Room Humidity (%)	Room atrn (hPa)	Teaming Speed (mm/min)
5~35	45~85	860~1060	300

⊕ Packaging Carton

Item	Reel Packing	Inner Box Packing	Carton Packing
MPL0420	3,000 PCS / Reel	6,000 PCS / Box	24,000 PCS / Box
MPL0518	3,000 PCS / Reel	6,000 PCS / Box	24,000 PCS / Box
MPL0520	3,000 PCS / Reel	6,000 PCS / Box	24,000 PCS / Box
MPL0530	2,000 PCS / Reel	4,000 PCS / Box	16,000 PCS / Box
MPL0618	2,000 PCS / Reel	4,000 PCS / Box	16,000 PCS / Box
MPL0620	2,000 PCS / Reel	4,000 PCS / Box	16,000 PCS / Box
MPL0624	2,000 PCS / Reel	4,000 PCS / Box	16,000 PCS / Box
MPL0630	1,000 PCS / Reel	2,000 PCS / Box	8,000 PCS / Box
MPL0640	1,000 PCS / Reel	2,000 PCS / Box	8,000 PCS / Box
MPL0650	1,000 PCS / Reel	2,000 PCS / Box	8,000 PCS / Box
MPL1040	1,000 PCS / Reel	2,000 PCS / Box	8,000 PCS / Box
MPL1050	800 PCS / Reel	1,600 PCS / Box	6,400 PCS / Box
MPL1235	800 PCS / Reel	1,600 PCS / Box	6,400 PCS / Box
MPL1250	500 PCS / Reel	1,000 PCS / Box	4,000 PCS / Box
MPL1265	500 PCS / Reel	1,000 PCS / Box	4,000 PCS / Box
MPL1770	300 PCS / Reel	600 PCS / Box	1,800 PCS / Box

