High Curent Inductor / MPSZ_A Type (AEC-Q200)

.Features:

1. Shielded construction with high curren, low DCR & high efficiency.
2. Frequency range up to 1.0 MHz.
3. High reliability with Reliability test complied to AEC-Q200
4. Operating temperature: -40~+125℃(+155℃ Maximum)

.Applications:

1. Handles high transient current spikes without saturation.
2. Ultra low buzz noise, due to composite construction

.Product Identification

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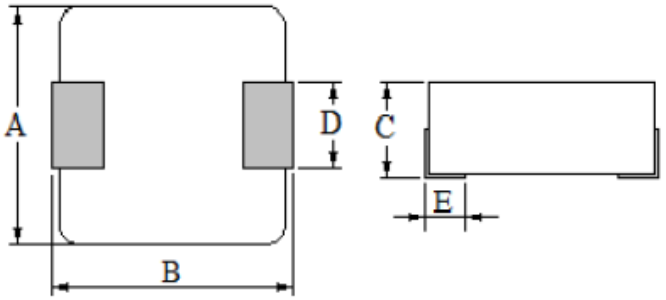
1 2 3 4 5

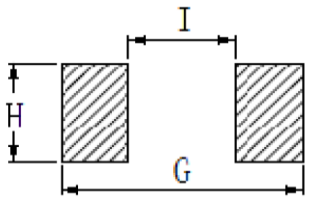
Products Series	Dimension		Type
MPSZ	0420	4.40*4.10*2.0mm	AH=Alloy
	0630	7.00*6.60*3.00mm	AT=Carbonyl Iron
	1050	10.80*10.00*5.00mm	
	1250	13.50*12.60*5.00mm	

Inductance		Tolerance	
R10	0.1uH	J	5%
1R0	1.0uH	K	10%
6R8	6.8uH	M	20%
100	10uH		

.Shape and Dimension



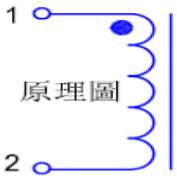
.Recommended PCB Pattern



Dimensions(mm)

Type	A	B	C	D	E	G	H	I
MPSZ0420A□	4.40 ± 0.4	4.10 ± 0.3	2.0 Max	2.00 ± 0.3	1.00 ± 0.3	5.20 Ref	2.50 Ref	2.20 Ref
MPSZ0530A□	5.50 ± 0.4	5.00 ± 0.3	3.0 Max	2.00 ± 0.3	1.00 ± 0.3	6.00 Ref	2.80 Ref	2.20 Ref
MPSZ0630A□	7.00 ± 0.5	6.60 ± 0.2	3.0 Max	3.00 ± 0.3	1.60 ± 0.3	8.30 Ref	3.50 Ref	3.40 Ref
MPSZ0650A□	7.00 ± 0.5	6.60 ± 0.2	5.0 Max	3.00 ± 0.3	1.60 ± 0.3	8.30 Ref	3.50 Ref	3.40 Ref
MPSZ1040A□	10.8 ± 0.5	10.0 ± 0.3	4.0 Max	3.00 ± 0.5	2.00 ± 0.5	12.20 Ref	4.10 Ref	5.80 Ref
MPSZ1050A□	10.8 ± 0.5	10.0 ± 0.3	5.0 Max	3.00 ± 0.5	2.00 ± 0.5	12.20 Ref	4.10 Ref	5.80 Ref
MPSZ1235A□	13.5 ± 0.5	12.6 ± 0.3	3.5 Max	4.00 ± 0.5	2.30 ± 0.5	13.80 Ref	5.00 Ref	7.80 Ref
MPSZ1250A□	13.5 ± 0.5	12.6 ± 0.3	5.0 Max	4.00 ± 0.5	2.30 ± 0.5	13.80 Ref	5.00 Ref	7.80 Ref
MPSZ1260A□	13.5 ± 0.5	12.6 ± 0.3	6.0 Max	4.00 ± 0.5	2.30 ± 0.5	13.80 Ref	5.00 Ref	7.80 Ref
MPSZ1770A□	17.5 ± 0.5	17.0 ± 0.5	7.0 Max	12.0 ± 0.5	2.50 ± 0.5	18.20 Ref	12.30 Ref	11.20 Ref

.Equivalent Circuit Schematic

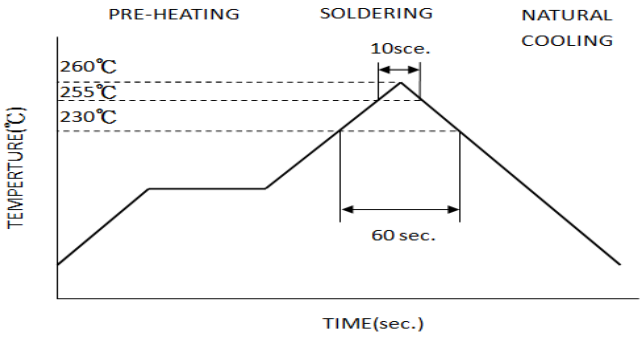


.Material List

No.	Location	Material
1	Core	Iron Powder or Equivalent
2	Wire	G2Polyurethane enA□eled or Equivalent
3	Hoop	C5191H or Equivalent
4	Glue	Resin

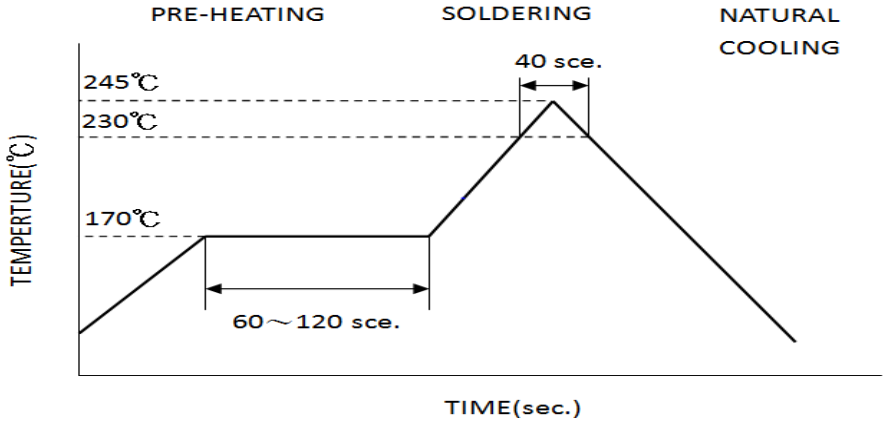
High Curent Inductor / MPSZ_A Type (AEC-Q200)

. 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 IA□p shall be used, side heat will be beyond range of resistance heat, so we can't recommend it.

High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Electrical Characteristics MPSZ0420A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0420A□-R10M	0.10	20%	12	22	3.5	4	100K / 0.25V
MPSZ0420A□-R22M	0.22	20%	9	12.5	6	6.6	100K / 0.25V
MPSZ0420A□-R47M	0.47	20%	7	12	12.5	14	100K / 0.25V
MPSZ0420A□-R56M	0.56	20%	6.5	10	14	16	100K / 0.25V
MPSZ0420A□-R68M	0.68	20%	6	9	16	18	100K / 0.25V
MPSZ0420A□-1R0M	1	20%	4.5	7	24	27	100K / 0.25V
MPSZ0420A□-1R2M	1.2	20%	4.5	7	24	27	100K / 0.25V
MPSZ0420A□-1R5M	1.5	20%	4	6	38	46	100K / 0.25V
MPSZ0420A□-2R2M	2.2	20%	3	5	52	58	100K / 0.25V
MPSZ0420A□-3R3M	3.3	20%	2.5	4	74	87	100K / 0.25V
MPSZ0420A□-4R7M	4.7	20%	2.2	3	92	105	100K / 0.25V
MPSZ0420A□-6R8M	6.8	20%	2	2.5	162	178	100K / 0.25V
MPSZ0420A□-8R2M	8.2	20%	1.8	2	188	207	100K / 0.25V
MPSZ0420A□-100M	10	20%	1.6	1.8	256	282	100K / 0.25V

. Electrical Characteristics MPSZ0530A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0530A□-R47M	0.47	20%	12	15	6.5	7.5	100K / 0.25V
MPSZ0530A□-R68M	0.68	20%	8.5	14	8.5	9.8	100K / 0.25V
MPSZ0530A□-1R0M	1	20%	8	11	13	14	100K / 0.25V
MPSZ0530A□-1R5M	1.5	20%	6	9.5	16	20	100K / 0.25V
MPSZ0530A□-2R2M	2.2	20%	5.5	9	27	33	100K / 0.25V
MPSZ0530A□-3R3M	3.3	20%	5	6	32	38	100K / 0.25V
MPSZ0530A□-4R7M	4.7	20%	4	5	48	54	100K / 0.25V
MPSZ0530A□-6R8M	6.8	20%	3.5	4.3	75	76	100K / 0.25V
MPSZ0530A□-100M	10	20%	2.7	3.5	115	130	100K / 0.25V

High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Electrical Characteristics MPSZ0630A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0630A□-R10M	0.1	20%	32.5	60	1.5	1.7	100K / 0.25V
MPSZ0630A□-R15M	0.15	20%	30	40	1.9	2.5	100K / 0.25V
MPSZ0630A□-R22M	0.22	20%	21	34	2.5	3	100K / 0.25V
MPSZ0630A□-R33M	0.33	20%	21	25	3	3.5	100K / 0.25V
MPSZ0630A□-R47M	0.47	20%	18	20	3.5	4.1	100K / 0.25V
MPSZ0630A□-R56M	0.56	20%	15	18	4.25	4.9	100K / 0.25V
MPSZ0630A□-R68M	0.68	20%	14	17	5	5.7	100K / 0.25V
MPSZ0630A□-R82M	0.82	20%	12	16	6	6.9	100K / 0.25V
MPSZ0630A□-1R0M	1	20%	11	15	7	7.5	100K / 0.25V
MPSZ0630A□-1R2M	1.2	20%	10	14	8	10.5	100K / 0.25V
MPSZ0630A□-1R5M	1.5	20%	9	14	10.6	12.1	100K / 0.25V
MPSZ0630A□-2R2M	2.2	20%	7	10	15.5	17.5	100K / 0.25V
MPSZ0630A□-3R3M	3.3	20%	6	9.5	23	26	100K / 0.25V
MPSZ0630A□-4R7M	4.7	20%	5.5	6.5	34.5	38	100K / 0.25V
MPSZ0630A□-5R6M	5.6	20%	5	6.25	36	42	100K / 0.25V
MPSZ0630A□-6R8M	6.8	20%	5	6	43	50	100K / 0.25V
MPSZ0630A□-8R2M	8.2	20%	4.5	6	58.5	65	100K / 0.25V
MPSZ0630A□-100M	10	20%	4.5	5.5	64	68	100K / 0.25V
MPSZ0630A□-120M	12	20%	3.5	5	85	98	100K / 0.25V
MPSZ0630A□-150M	15	20%	3	4.5	98	115	100K / 0.25V
MPSZ0630A□-220M	22	20%	2.3	3.1	115	165	100K / 0.25V
MPSZ0630A□-330M	33	20%	2	2.5	165	257	100K / 0.25V

. Electrical Characteristics MPSZ0650A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0650A□-R22M	0.22	20%	30	35	1.1	1.3	100K / 0.25V
MPSZ0650A□-R36M	0.36	20%	21	25	2.7	3.1	100K / 0.25V
MPSZ0650A□-R40M	0.40	20%	20	23	3.2	3.5	100K / 0.25V
MPSZ0650A□-R47M	0.47	20%	20	21	3.25	3.75	100K / 0.25V
MPSZ0650A□-R56M	0.56	20%	18	20	3.4	3.6	100K / 0.25V
MPSZ0650A□-R68M	0.68	20%	16.5	18	3.9	4.2	100K / 0.25V
MPSZ0650A□-R82M	0.82	20%	16	17	4.6	4.9	100K / 0.25V
MPSZ0650A□-1R0M	1.0	20%	12.5	15	5.6	6.5	100K / 0.25V
MPSZ0650A□-1R2M	1.2	20%	11	13	6.7	7.5	100K / 0.25V
MPSZ0650A□-1R5M	1.5	20%	11	12	6.7	7.5	100K / 0.25V
MPSZ0650A□-2R2M	2.2	20%	9	10	11.2	12.5	100K / 0.25V
MPSZ0650A□-3R3M	3.3	20%	8.5	9	19.9	20.9	100K / 0.25V
MPSZ0650A□-4R7M	4.7	20%	6	8	26	29	100K / 0.25V
MPSZ0650A□-5R6M	5.6	20%	6	7	31.5	34.4	100K / 0.25V
MPSZ0650A□-6R8M	6.8	20%	5.5	6	36.5	41	100K / 0.25V
MPSZ0650A□-8R2M	8.2	20%	5.5	5.5	40	43	100K / 0.25V
MPSZ0650A□-100M	10	20%	4.5	5.3	54	60	100K / 0.25V
MPSZ0650A□-120M	12	20%	4	5	58	65	100K / 0.25V

High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Electrical Characteristics MPSZ0650A□ Type

MPSZ0650A□-150M	15	20%	3.1	4	78	90	100K / 0.25V
MPSZ0650A□-180M	18	20%	3	3.5	83	105	100K / 0.25V
MPSZ0650A□-220M	22	20%	2.6	3.5	120	140	100K / 0.25V
MPSZ0650A□-330M	33	20%	2.3	3	165	190	100K / 0.25V
MPSZ0650A□-470M	47	20%	2	2.8	250	290	100K / 0.25V

. Electrical Characteristics MPSZ1040A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1040A□-R22M	0.22	20%	32	55	0.9	1	100K / 0.25V
MPSZ1040A□-R36M	0.36	20%	30	50	1.05	1.2	100K / 0.25V
MPSZ1040A□-R39M	0.39	20%	26	45	1.1	1.2	100K / 0.25V
MPSZ1040A□-R45M	0.45	20%	26	42	1.1	1.3	100K / 0.25V
MPSZ1040A□-R47M	0.47	20%	25	40	1.53	1.68	100K / 0.25V
MPSZ1040A□-R56M	0.56	20%	25	33	1.6	1.8	100K / 0.25V
MPSZ1040A□-R68M	0.68	20%	23	30	2.1	2.4	100K / 0.25V
MPSZ1040A□-1R0M	1	20%	18	28	3	3.3	100K / 0.25V
MPSZ1040A□-1R5M	1.5	20%	15	26	3.8	4.2	100K / 0.25V
MPSZ1040A□-1R8M	1.8	20%	13	23	5	5.8	100K / 0.25V
MPSZ1040A□-2R0M	2.0	20%	12	20	6	6.9	100K / 0.25V
MPSZ1040A□-2R2M	2.2	20%	12	18	6	7	100K / 0.25V
MPSZ1040A□-3R3M	3.3	20%	10	16	10.8	11.8	100K / 0.25V
MPSZ1040A□-4R7M	4.7	20%	8.5	13	17	20	100K / 0.25V
MPSZ1040A□-5R6M	5.6	20%	8	11	20	23	100K / 0.25V
MPSZ1040A□-6R8M	6.8	20%	7	10	22.5	25	100K / 0.25V
MPSZ1040A□-8R2M	8.2	20%	7	9	25	27	100K / 0.25V
MPSZ1040A□-100M	10	20%	6.5	8.5	27	30	100K / 0.25V
MPSZ1040A□-150M	15	20%	6.25	7	40	45	100K / 0.25V
MPSZ1040A□-220M	22	20%	5	5.5	60	66	100K / 0.25V
MPSZ1040A□-330M	33	20%	4	4.5	85	92	100K / 0.25V
MPSZ1040A□-470M	47	20%	3.3	3.5	130	145	100K / 0.25V
MPSZ1040A□-680M	68	20%	2	3	195	210	100K / 0.25V

. Electrical Characteristics MPSZ1050A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Max.	Isat (Amp) Max.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1050A□-R22M	0.22	20%	37	60	0.67	0.8	100K / 0.25V
MPSZ1050A□-R26M	0.26	20%	35	60	0.9	1	100K / 0.25V
MPSZ1050A□-1R0M	1	20%	19	29	2.3	2.6	100K / 0.25V
MPSZ1050A□-1R2M	1.2	20%	18	28	2.8	3.1	100K / 0.25V
MPSZ1050A□-1R5M	1.5	20%	16	26	3.3	3.8	100K / 0.25V
MPSZ1050A□-2R2M	2.2	20%	13	20	5.4	6	100K / 0.25V
MPSZ1050A□-3R3M	3.3	20%	12	16	9.3	11	100K / 0.25V
MPSZ1050A□-4R7M	4.7	20%	9	15	12.5	15	100K / 0.25V
MPSZ1050A□-6R8M	6.8	20%	8.5	14	16	18.5	100K / 0.25V
MPSZ1050A□-100M	10	20%	8	10	25	28	100K / 0.25V
MPSZ1050A□-220M	22	20%	5.5	6	45	50	100K / 0.25V
MPSZ1050A□-330M	33	20%	4.5	5	70	76	100K / 0.25V

High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Electrical Characteristics MPSZ1235A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1235A□-R22M	0.22	20%	38	55	1	1.2	100K / 0.25V
MPSZ1235A□-R56M	0.56	20%	29	44	1.7	2	100K / 0.25V
MPSZ1235A□-R68M	0.68	20%	28	42	2	2.3	100K / 0.25V
MPSZ1235A□-R82M	0.82	20%	25	37	2.5	2.9	100K / 0.25V
MPSZ1235A□-1R0M	1	20%	24	34	3	3.4	100K / 0.25V
MPSZ1235A□-1R2M	1.2	20%	20	27	3.3	3.8	100K / 0.25V
MPSZ1235A□-1R5M	1.5	20%	18	26	4.1	4.7	100K / 0.25V
MPSZ1235A□-2R2M	2.2	20%	14	20	6	6.9	100K / 0.25V
MPSZ1235A□-3R3M	3.3	20%	13	16	8.3	9.5	100K / 0.25V
MPSZ1235A□-4R7M	4.7	20%	9	15	15	17	100K / 0.25V
MPSZ1235A□-5R6M	5.6	20%	8	14	18.3	19	100K / 0.25V
MPSZ1235A□-6R8M	6.8	20%	7	13	19.8	22	100K / 0.25V
MPSZ1235A□-8R2M	8.2	20%	6.5	12	24.8	28	100K / 0.25V
MPSZ1235A□-100M	10	20%	6	10	26	29	100K / 0.25V

. Electrical Characteristics MPSZ1250A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1250A□-R22M	0.22	20%	51	75	0.6	0.8	100K / 0.25V
MPSZ1250A□-R47M	0.47	20%	35	56	1	1.4	100K / 0.25V
MPSZ1250A□-R68M	0.68	20%	33	48	1.34	1.55	100K / 0.25V
MPSZ1250A□-1R0M	1	20%	26	35	1.9	2.2	100K / 0.25V
MPSZ1250A□-1R5M	1.5	20%	23	32	2.7	3.2	100K / 0.25V
MPSZ1250A□-2R2M	2.2	20%	15	25	4	5	100K / 0.25V
MPSZ1250A□-3R3M	3.3	20%	12	23	7.5	9	100K / 0.25V
MPSZ1250A□-4R7M	4.7	20%	11	17	12	14	100K / 0.25V
MPSZ1250A□-5R6M	5.6	20%	10.5	15	13	15	100K / 0.25V
MPSZ1250A□-6R8M	6.8	20%	10	14	15	18	100K / 0.25V
MPSZ1250A□-8R2M	8.2	20%	9	13	17	20	100K / 0.25V
MPSZ1250A□-100M	10	20%	8	12	22	25	100K / 0.25V

. Electrical Characteristics MPSZ1260A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1260A□-6R8M	6.8	20%	11.5	15	10	13.8	100K / 0.25V
MPSZ1260A□-8R2M	8.2	20%	11	13.5	13.6	16	100K / 0.25V
MPSZ1260A□-100M	10	20%	10	12.5	18	20.7	100K / 0.25V
MPSZ1260A□-120M	12	20%	7	10	20	23	100K / 0.25V
MPSZ1260A□-150M	15	20%	6	9	25	29	100K / 0.25V
MPSZ1260A□-180M	18	20%	5	8	30	35	100K / 0.25V
MPSZ1260A□-220M	22	20%	5	7.5	34	39.5	100K / 0.25V
MPSZ1260A□-270M	27	20%	4	6.5	49	56	100K / 0.25V
MPSZ1260A□-330M	33	20%	4	6	65	75	100K / 0.25V
MPSZ1260A□-470M	47	20%	3.5	5.5	80	90	100K / 0.25V
MPSZ1260A□-680M	68	20%	3.25	4.5	115	130	100K / 0.25V
MPSZ1260A□-820M	82	20%	3	4	120	140	100K / 0.25V

High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Electrical Characteristics MPSZ1260A□ Type

MPSZ1260A□-101M	100	20%	2.5	3.5	180	200	100K / 0.25V
MPSZ1260A□-121M	120	20%	2.3	3.2	210	235	100K / 0.25V
MPSZ1260A□-151M	150	20%	2	2.7	300	350	100K / 0.25V

. Electrical Characteristics MPSZ1770A□ Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1770A□-R47M	0.47	20%	60	75	0.8	0.95	100K / 0.25V
MPSZ1770A□-1R0M	1.0	20%	49.5	54	1.2	1.45	100K / 0.25V
MPSZ1770A□-1R5M	1.5	20%	40	40	1.85	2.15	100K / 0.25V
MPSZ1770A□-2R2M	2.2	20%	34	37	2.15	2.5	100K / 0.25V
MPSZ1770A□-3R3M	3.3	20%	26	30	3.4	3.95	100K / 0.25V
MPSZ1770A□-4R7M	4.7	20%	24	27	4.12	4.72	100K / 0.25V
MPSZ1770A□-5R6M	5.6	20%	20	23	5.8	6.5	100K / 0.25V
MPSZ1770A□-6R8M	6.8	20%	20	22	6.55	7.55	100K / 0.25V
MPSZ1770A□-8R2M	8.2	20%	16	20	8.1	8.7	100K / 0.25V
MPSZ1770A□-100M	10	20%	14	18	10	12	100K / 0.25V
MPSZ1770A□-150M	15	20%	12	13	14.5	15	100K / 0.25V
MPSZ1770A□-220M	22	20%	9.5	11	20.5	23	100K / 0.25V
MPSZ1770A□-330M	33	20%	9	10	35.1	37	100K / 0.25V
MPSZ1770A□-470M	47	20%	6.8	7.5	41	47	100K / 0.25V
MPSZ1770A□-680M	68	20%	5.2	6.5	74	85	100K / 0.25V
MPSZ1770A□-101M	100	20%	3.3	5	110	130	100K / 0.25V
MPSZ1770A□-121M	120	20%	3	5	115	135	100K / 0.25V
MPSZ1770A□-151M	150	20%	2.7	5	150	175	100K / 0.25V
MPSZ1770A□-181M	180	20%	2.5	4.5	205	235	100K / 0.25V
MPSZ1770A□-221M	220	20%	2.3	4	235	250	100K / 0.25V

NOTE:

1. All test data is referenced to 25℃ A□bient.
2. Irms: DC current(A) that will cause an approximate △T of 40℃.
3. Isat: DC current(A) that will cause Lo to drop approximate 30%.
4. Operating temperature range is -40℃ to 125℃.
5. The Part temperature (A□bient + △T) should not exceed 125℃ under worst case operating conditions.
6. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

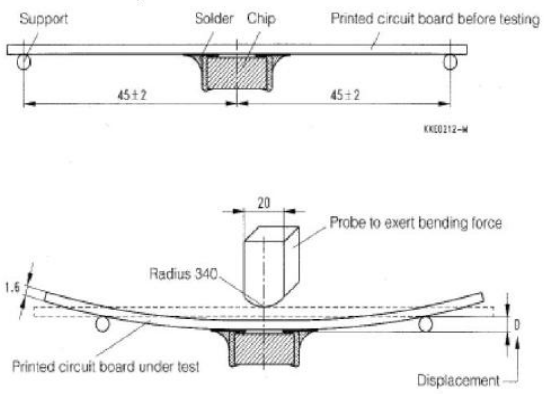
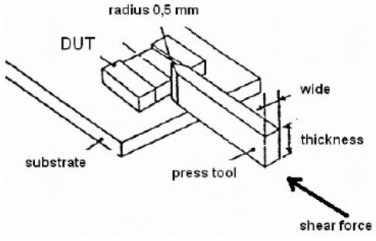
High Curent Inductor / MPSZ_A Type (AEC-Q200)

. Reliability and Test Conditions(可靠性測試條件)

1. Mechanical Reliablilty

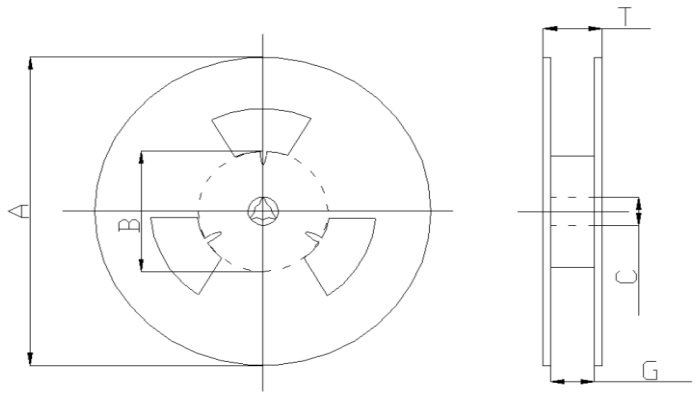
Item	Test Conditions	Specification
高溫儲存測試 High Temperature Exposure(Storage) AEC-Q200	外觀:無損傷 感值測量:原感量±10% Q值:不得低於或超過規格 RDC:原RDC± 15% Appearance:No damage. Inductance:within±10% of initial value Q:Shall not exceed the specification value. RDC:within ± 15% of initial value and shall not exceed the specification value	在125±2℃(最高溫度155℃)溫度條件下儲存 1000h±2h；在室溫下擱置24小時；檢查外觀缺陷，測試感值、品質因素、直流電阻。 Temperature:125±2℃(+155℃ Maximum) Duration:1000±2hrs. Measured at room temperature after placing for 24±2
低溫儲存測試 Low Temperature Exposure(Storage) AEC-Q200		在-40±2℃(最低溫度-55℃)溫度條件下儲存 1000h±2h；在室溫下擱置24小時；檢查外觀缺陷，測試感值、品質因素、直流電阻。 Temperature:-40±2℃(-55℃ Maximum) Duration:1000±2hrs Measured at room temperature after placing for 24±2
濕度測試 Blased Humidity AEC-Q200		在85±5%RH濕度、85±5℃條件下 儲存1000±2h；在室溫下擱置1h；檢查外觀缺陷，測試感值、品質因素、直流電阻。 Humidity ：85±5%R.H, Temperature：85℃±5℃ Duration : 1000±2hrs Measured at room temperature after placing for24±2hrs
高溫工作壽命測試 High Temperature Operational Life AEC-Q200		在155±2℃溫度並負載100%額定電流條件下，儲存1000h±2h；在室溫下擱置24小時；檢查外觀缺陷，測試感值、品質因素、直流電阻。 Temperature:155±2℃(Inductor) Duration:1000±2hrs with 100% rated current. Measured at room temperature after placing for 24±2
耐溶劑測試 Resistance to Solvents	外觀:無損傷 Appearance:No damage.	使用無水乙醇溶劑或OKEM Add aqueous wash chemical - OKEM clean or equivalent.
機械衝擊測試 Mechanical Shock	外觀:無損傷 感值測量:原感量±10% Q值:不得低於或超過規格 RDC:原RDC± 15% Appearance:No damage. Inductance:within±10% of initial value Q:Shall not exceed the specification value. RDC:within ± 15% of initial value and shall not exceed the specification value	沿3個垂直軸在每個方向上震動。 Shocks in each direction along 3 perpendicular axes. Type / Peak value (g's) / Normal duration (D) (ms) / Wave form / Velocity change (Vi)ft/sec SMD / 100 / 6 / Half-sine / 12.3 Lead / 100 / 6 / Half-sine / 12.3
震盪測試 Vibration		將產品固定在振動治具內， 在10-2000 Hz範圍內進行測試。分X、Y、Z 三個方向振動各12個循環，每個方向振動4H。 Oscillation Frequency:10~2K~10Hz for 4hrs. Test Direction along X,Y,Z perpendicular axes. Testing Time:12 cycles(4hrs each cycle and total 48hrs)
回流焊測試 Resistance to Soldering Heat		過回流焊曲線；峰值溫度：260±5℃，每次10秒並進行3次循環。 Reflow Temperature 260±5℃ for 10±1sec. Number of heat cycles:3 times.

High Curent Inductor / MPSZ_A Type (AEC-Q200)

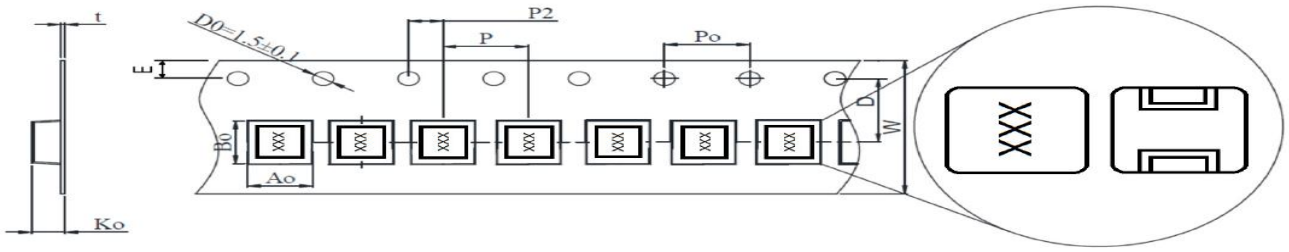
Item	Test Conditions	Specification
可焊性測試 Solderability	端子必須有95%以上著錫。 More than 95% of the terminal electrode should be covered with solder.	端子浸入助焊劑，然後浸入245±5℃錫爐中5秒；焊料：Sn(63)/Pb(37) ；助焊劑：松香助焊劑 Solder:SN63% Pb(37%) Temperature:245±5℃ Dip time:5sec Depth: completely cover the termination
外觀檢測: External Visual	外觀:無損傷 Appearance:No damage.	檢查料件的結構，印字和組裝製程工藝。不需要電氣測試。 Inspect device construction, marking and workmanship. Electrical Test not required.
尺寸測量 Physical Dimension	符合規格書標訂之尺寸大小 According to the product specification size measurement	符合規格書標訂之尺寸大小 According to the product specification size measurement
板柔性測試 Board Flex	外觀:無損傷 Appearance:No damage.	將產品焊於PCB上，將PCB對中彎折，到達撓度2mm，持續60S。 Place the 100mm X 40mm board into a fixture similar to the one shown in below Figure with the component facing down. The apparatus shall consist of mechanical means to apply a force which will bend the board (D) x = 2 mm minimum. The duration of the applied forces shall be 60 (+ 5) sec. The force is to be applied only once to the board. 
端子強度測試 Terminal Strength(SMD)	外觀:無損傷 Appearance:No damage.	將產品焊於PCB上，並朝一面持續施加推力17.7 N (1.8 Kg)持續60+1秒。 With the component mounted on a PCB with the device to be tested, apply a 17.7 N (1.8 Kg) force to the side of a device being tested. This force shall be applied for 60 +1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested. 

High Curent Inductor / MPSZ_A Type (AEC-Q200)

.Reel Dimension(m/m)



TYPE	Dimensions in (mm)					Reel Packing Unit
	A	B	C	G	T	PCS / REEL
MPSZ04_A□	330±1	100±1	13±1	12.5±1	14.5±2	3000
MPSZ05_A□	330±1	100±1	13±1	16.5±1	20.4±2	1500
MPSZ06_A□	330±1	100±1	13±1	16.5±1	20.4±2	1000
MPSZ10_A□	330±1	100±1	13±1	24.0±1	28.5±2	800
MPSZ12_A□	330±1	100±1	13±1	24.0±1	28.5±2	500
MPSZ17_A□	330±1	100±1	13±1	32.0±1	36.0±2	250



TYPE	Dimensions in (mm)								
	W	Ao	Bo	Ko	D	Do	E	P	Po
MPSZ0420A□	12±0.5	4.4±0.15	5±0.15	2.1±0.15	5.5±0.1	1.5±0.1	1.75±0.1	8±0.1	4±0.1
MPSZ0530A□	16±0.5	5.8±0.15	6.2±0.15	3.1±0.15	7.5±0.1	1.5±0.1	1.75±0.1	8±0.1	4±0.1
MPSZ0630A□	16±0.5	7.2±0.15	8±0.15	3.1±0.15	7.5±0.1	1.5±0.1	1.75±0.1	12±0.15	4±0.1
MPSZ0650A□	16±0.5	7.2±0.15	8±0.15	5.1±0.15	7.5±0.1	1.5±0.1	1.75±0.1	12±0.15	4±0.1
MPSZ1040A□	24±0.5	10.8±0.15	10.8±0.15	4.1±0.15	11.5±0.1	1.5±0.1	1.75±0.1	16±0.15	4±0.1
MPSZ1050A□	24±0.5	10.8±0.15	10.8±0.15	5.1±0.15	11.5±0.1	1.5±0.1	1.75±0.1	16±0.15	4±0.1
MPSZ1235A□	24±0.5	13.3±0.15	14.2±0.15	4.1±0.15	11.5±0.1	1.5±0.1	1.75±0.1	20±0.15	4±0.1
MPSZ1250A□	24±0.5	13.3±0.15	14.2±0.15	5.1±0.15	11.5±0.1	1.5±0.1	1.75±0.1	20±0.15	4±0.1
MPSZ1260A□	24±0.5	13.3±0.15	14.2±0.15	6.1±0.15	11.5±0.1	1.5±0.1	1.75±0.1	20±0.15	4±0.1
MPSZ1770A□	32±0.5	17.2±0.15	18±0.15	7.1±0.15	14.2±0.1	1.5±0.1	1.75±0.1	24±0.15	4±0.1