High Curent Inductor / MPSZ Type

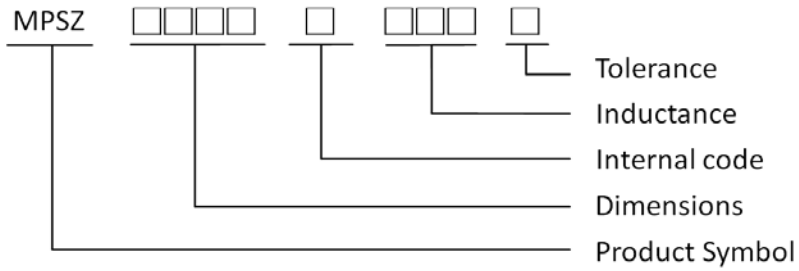
.Features:

1. Shielded construction.
2. Frequency range up to 1.0 MHz.
3. Lowest DCR / µH, in this package size.

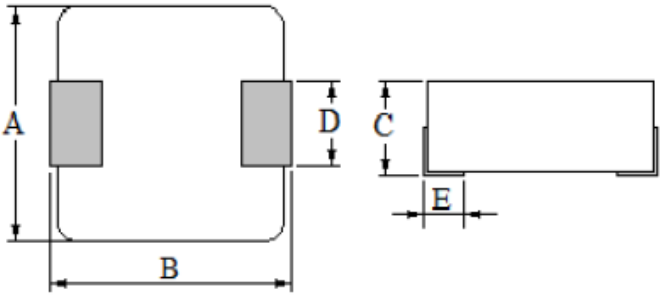
.Applications:

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

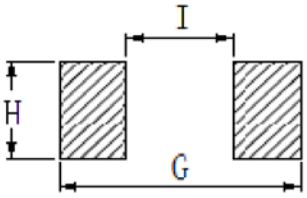
.Product Identification



.Shape and Dimension



.Recommended PCB Pattern

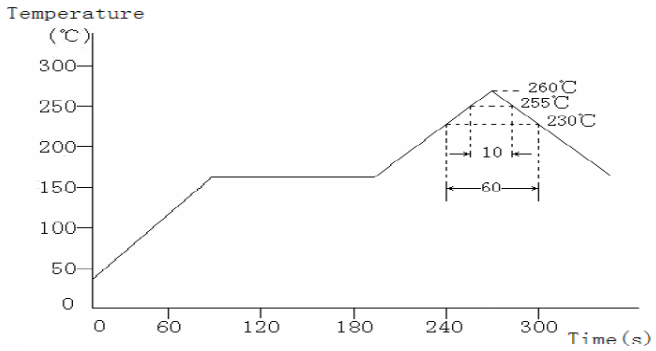


Dimensions(mm)

Type	A	B	C	D	E	G	H	I
MPSZ0420T	4.06 ± 0.3	4.45 ± 0.4	2.0 ± 0.2	2.0 Max	1.1 ± 0.3	4.75 Ref	2.50 Ref	1.75 Ref
MPSZ0520T	5.18 ± 0.3	5.45 ± 0.4	2.0 Max	2.3 ± 0.2	1.2 ± 0.3	7.00 Ref	2.50 Ref	3.00 Ref
MPSZ0530H	5.18 ± 0.3	5.45 ± 0.4	3.0 Max	2.30 ± 0.2	1.2 ± 0.3	7.00 Ref	2.50 Ref	3.00 Ref
MPSZ0612H	6.60 ± 0.2	7.40 Max	1.2 Max	3.00 ± 0.2	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ0620T	6.60 ± 0.2	7.40 Max	2.0 Max	3.00 ± 0.2	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ0624S	6.60 ± 0.2	7.40 Max	2.4 Max	3.00 ± 0.2	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ0630H	6.60 ± 0.2	7.40 Max	3.0 Max	3.00 ± 0.2	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ0640S	6.60 ± 0.2	7.40 Max	4.0 Max	3.00 ± 0.2	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ0650S	6.60 ± 0.2	7.40 Max	5.0 Max	3.00 ± 0.3	1.60 ± 0.3	7.50 Ref	3.50 Ref	2.50 Ref
MPSZ1040S	10.3 ± 0.2	10.5 ±1.0	4.0 Max	3.00 ± 0.3	2.00 ± 0.5	14.20 Ref	3.80 Ref	5.00 Ref
MPSZ1045S	10.3 ± 0.2	10.5 ±1.0	4.5 Max	3.00 ± 0.3	2.00 ± 0.5	14.20 Ref	3.80 Ref	5.00 Ref
MPSZ1050S	10.3 ± 0.2	10.5 ±1.0	5.0 Max	3.00 ± 0.3	2.00 ± 0.5	14.20 Ref	3.80 Ref	5.00 Ref
MPSZ1240S	12.8 ± 0.5	13.2 ± 1.0	4.0 Max	3.80 ± 0.3	2.50 ± 0.5	13.60 Ref	6.00 Ref	7.20 Ref
MPSZ1250S	12.8 ± 0.5	13.2 ± 1.0	5.0 Max	3.80 ± 0.3	2.50 ± 0.5	13.60 Ref	6.00 Ref	7.20 Ref
MPSZ1260S	12.8 ± 0.5	13.2 ± 1.0	6.0 Max	3.80 ± 0.3	2.50 ± 0.5	13.60 Ref	6.00 Ref	7.20 Ref
MPSZ1265S	12.8 ± 0.5	13.2 ± 1.0	6.5 Max	3.80 ± 0.3	2.50 ± 0.5	13.60 Ref	6.00 Ref	7.20 Ref
MPSZ1770H	17.15 ± 0.5	17.5 ± 1.0	7.0 Max	11.94 ± 0.3	2.50 ± 0.5	18.40 Ref	13.0 Ref	4.60 Ref

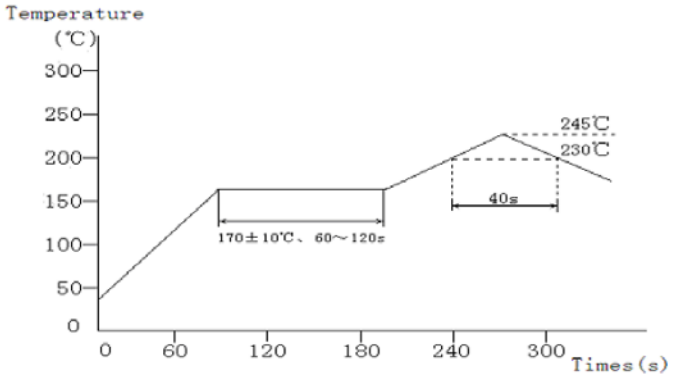
High Curent Inductor / MPSZ Type

. 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.

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ0420S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0420T-R10□	0.10	20%	12	22	3.5	4	100K / 0.1
MPSZ0420T-R22□	0.22	20%	9	12.5	6.6	8	100K / 0.1
MPSZ0420T-R36□	0.36	20%	7	11	11	16	100K / 0.1
MPSZ0420T-R47□	0.47	20%	6.5	10	16.5	25	100K / 0.1
MPSZ0420T-R56□	0.56	20%	6.5	9	18	27	100K / 0.1
MPSZ0420T-R68□	0.68	20%	6	8	22	29	100K / 0.1
MPSZ0420T-1R0□	1	20%	5	7	30	37	100K / 0.1
MPSZ0420T-1R5□	1.5	20%	4	6.5	40	48	100K / 0.1
MPSZ0420T-2R2□	2.2	20%	3	5	56	70	100K / 0.1
MPSZ0420T-3R3□	3.3	20%	2.5	4.5	74	87	100K / 0.1
MPSZ0420T-4R7□	4.7	20%	2.2	4	106	120	100K / 0.1
MPSZ0420T-5R6□	5.6	20%	2	3.5	146	170	100K / 0.1
MPSZ0420T-6R8□	6.8	20%	1.5	2.5	170	200	100K / 0.1
MPSZ0420T-8R2□	8.2	20%	1.2	2.2	240	260	100K / 0.1
MPSZ0420T-100□	10	20%	1	2	260	280	100K / 0.1

. Electrical Characteristics MPSZ0520T Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0520T-R10□	0.10	20%	13	25	2.1	2.7	100K / 0.1
MPSZ0520T-R22□	0.22	20%	9	18	3.9	4.5	100K / 0.1
MPSZ0520T-R33□	0.33	20%	7	13	7.9	9.2	100K / 0.1
MPSZ0520T-R47□	0.47	20%	6	12	8.4	9.6	100K / 0.1
MPSZ0520T-R68□	0.68	20%	5	10	11	14	100K / 0.1
MPSZ0520T-1R0□	1	20%	4.5	9	16.8	18.1	100K / 0.1
MPSZ0520T-2R2□	2.2	20%	4	8	26.7	30.6	100K / 0.1
MPSZ0520T-3R3□	3.3	20%	3.5	5.5	62.5	75	100K / 0.1
MPSZ0520T-4R7□	4.7	20%	3	5	74	82	100K / 0.1
MPSZ0520T-5R6□	5.6	20%	2.5	5	84	92	100K / 0.1
MPSZ0520T-6R8□	6.8	20%	2.2	4.5	114	134	100K / 0.1
MPSZ0520T-100□	10	20%	2	4	200	220	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ0530H Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0530H-R68□	0.68	20%	7	14	10	12	100K / 0.1
MPSZ0530H-1R0□	1	20%	6	12	13	14	100K / 0.1
MPSZ0530H-1R2□	1.2	20%	6.5	11	15	16	100K / 0.1
MPSZ0530H-1R5□	1.5	20%	5.5	10	20	25	100K / 0.1
MPSZ0530H-2R2□	2.2	20%	5	9	25	32	100K / 0.1
MPSZ0530H-3R3□	3.3	20%	4	7	33	38	100K / 0.1
MPSZ0530H-4R7□	4.7	20%	3	6	50	60	100K / 0.1
MPSZ0530H-6R8□	6.8	20%	2.5	4	85	100	100K / 0.1
MPSZ0530H-100□	10	20%	1.5	3	115	140	100K / 0.1

. Electrical Characteristics MPSZ0612H Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0612H-R56□	0.56	20%	6	11	13.5	16	100K / 0.1
MPSZ0612H-R68□	0.68	20%	5.5	10	14.7	17	100K / 0.1
MPSZ0612H-R82□	0.82	20%	5	9	19.1	22	100K / 0.1
MPSZ0612H-1R0□	1	20%	4	7	22.3	26	100K / 0.1
MPSZ0612H-2R2□	2.2	20%	3.5	5	64	67	100K / 0.1
MPSZ0612H-3R3□	3.3	20%	3	4	80	92	100K / 0.1
MPSZ0612H-4R7□	4.7	20%	2	3.5	120	130	100K / 0.1
MPSZ0612H-100□	10	20%	1.5	2.5	250	290	100K / 0.1

. Electrical Characteristics MPSZ0620H Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0620T-R10□	0.1	20%	16	30	2.7	3.5	100K / 0.1
MPSZ0620T-R33□	0.33	20%	13	24	4.3	5.2	100K / 0.1
MPSZ0620T-R47□	0.47	20%	10	18	7.3	8.4	100K / 0.1
MPSZ0620T-R68□	0.68	20%	8	16	10.8	12.5	100K / 0.1
MPSZ0620T-1R0□	1	20%	6	10	19.4	22	100K / 0.1
MPSZ0620T-1R5□	1.5	20%	5	10	24	30	100K / 0.1
MPSZ0620T-2R2□	2.2	20%	4	8	44	48	100K / 0.1
MPSZ0620T-3R3□	3.3	20%	3.5	7.5	66	74	100K / 0.1
MPSZ0620T-4R7□	4.7	20%	2.5	4	87	105	100K / 0.1
MPSZ0620T-6R8□	6.8	20%	1.8	3	120	130	100K / 0.1
MPSZ0620T-100□	10	20%	1.2	2.5	135	150	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ0624S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0624S-R47□	0.47	20%	10	19	5.7	6.5	100K / 0.1
MPSZ0624S-R68□	0.68	20%	9	18	7.9	9.4	100K / 0.1
MPSZ0624S-R82□	0.82	20%	8	16	9.6	11.8	100K / 0.1
MPSZ0624S-1R0□	1	20%	7.5	15	12.5	14.2	100K / 0.1
MPSZ0624S-1R5□	1.5	20%	6.5	13	17.4	21.2	100K / 0.1
MPSZ0624S-2R2□	2.2	20%	6	12	28	34	100K / 0.1
MPSZ0624S-3R3□	3.3	20%	4.5	9	45	51	100K / 0.1
MPSZ0624S-4R7□	4.7	20%	4	7.5	57	63	100K / 0.1
MPSZ0624S-5R6□	5.6	20%	3.5	5	42	45	100K / 0.1
MPSZ0624S-6R8□	6.8	20%	3	6	83	95	100K / 0.1
MPSZ0624S-8R2□	8.2	20%	2.5	5	94	106	100K / 0.1
MPSZ0624S-100□	10	20%	2	4	108	130	100K / 0.1

. Electrical Characteristics MPSZ0630H Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0630H-R10□	0.1	20%	22	40	1.4	1.8	100K / 0.1
MPSZ0630H-R20□	0.2	20%	18	34	2.4	3	100K / 0.1
MPSZ0630H-R33□	0.33	20%	14	28	3	3.5	100K / 0.1
MPSZ0630H-R47□	0.47	20%	11	20	3.6	4.1	100K / 0.1
MPSZ0630H-R68□	0.68	20%	9	17	4.6	5.3	100K / 0.1
MPSZ0630H-R82□	0.82	20%	8	16	5.4	6	100K / 0.1
MPSZ0630H-1R0□	1	20%	7.5	15	8.1	9.2	100K / 0.1
MPSZ0630H-1R5□	1.5	20%	7	14	10.5	12	100K / 0.1
MPSZ0630H-2R2□	2.2	20%	6	12	13.5	15	100K / 0.1
MPSZ0630H-3R3□	3.3	20%	5	10	18	22	100K / 0.1
MPSZ0630H-4R7□	4.7	20%	4.5	9	28	38	100K / 0.1
MPSZ0630H-5R6□	5.6	20%	4	8	39	46	100K / 0.1
MPSZ0630H-6R8□	6.8	20%	3.5	7	44	50	100K / 0.1
MPSZ0630H-8R2□	8.2	20%	3	6	54	60	100K / 0.1
MPSZ0630H-100□	10	20%	3	5.5	65	75	100K / 0.1
MPSZ0630H-150□	15	20%	2	4	90	105	100K / 0.1
MPSZ0630H-220□	22	20%	1.5	3	125	135	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ0640S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0640S-R47□	0.47	20%	12	22	3.2	4	100K / 0.1
MPSZ0640S-R68□	0.68	20%	10	20	4.4	5.3	100K / 0.1
MPSZ0640S-R82□	0.82	20%	9	18	5.9	7	100K / 0.1
MPSZ0640S-1R0□	1	20%	8	16	6.4	7.2	100K / 0.1
MPSZ0640S-1R5□	1.5	20%	7	14	8.1	9.7	100K / 0.1
MPSZ0640S-2R2□	2.2	20%	6	12	13	17	100K / 0.1
MPSZ0640S-3R3□	3.3	20%	5.5	11	21.4	25	100K / 0.1
MPSZ0640S-4R7□	4.7	20%	5	9	27.5	35	100K / 0.1
MPSZ0640S-6R8□	6.8	20%	4	8	36	45	100K / 0.1
MPSZ0640S-8R2□	8.2	20%	3.5	7	44	50	100K / 0.1
MPSZ0640S-100□	10	20%	3	6	56	65	100K / 0.1
MPSZ0640S-150□	15	20%	2.5	5	58	80	100K / 0.1
MPSZ0640S-220□	22	20%	2.5	4	80	92	100K / 0.1

. Electrical Characteristics MPSZ0650S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ0650S-R47□	0.47	20%	13	24	3.1	3.5	100K / 0.1
MPSZ0650S-R56□	0.56	20%	12	22	3.9	4.6	100K / 0.1
MPSZ0650S-R68□	0.68	20%	10	18	5.1	6	100K / 0.1
MPSZ0650S-R82□	0.82	20%	9	17	6	6.8	100K / 0.1
MPSZ0650S-1R0□	1	20%	8	16	6.4	7.2	100K / 0.1
MPSZ0650S-1R5□	1.5	20%	7.5	15	7.1	8	100K / 0.1
MPSZ0650S-2R2□	2.2	20%	7	14	10.5	13	100K / 0.1
MPSZ0650S-3R3□	3.3	20%	6	12	14.5	16	100K / 0.1
MPSZ0650S-4R7□	4.7	20%	5	10	17.8	20	100K / 0.1
MPSZ0650S-6R8□	6.8	20%	4	8	24.7	30	100K / 0.1
MPSZ0650S-8R2□	8.2	20%	4	7.5	35	41	100K / 0.1
MPSZ0650S-100□	10	20%	3.5	6.5	39	45	100K / 0.1
MPSZ0650S-150□	15	20%	3	5	49	55	100K / 0.1
MPSZ0650S-220□	22	20%	2.5	4.5	78	85	100K / 0.1
MPSZ0650S-330□	33	20%	2	4	150	180	100K / 0.1
MPSZ0650S-470□	47	20%	1.7	3	200	230	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ1040S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1040S-R22□	0.22	20%	30	60	1.3	1.5	100K / 0.1
MPSZ1040S-R36□	0.36	20%	25	50	1.4	1.7	100K / 0.1
MPSZ1040S-R47□	0.47	20%	20	40	1.7	2.2	100K / 0.1
MPSZ1040S-R56□	0.56	20%	18	35	2	2.4	100K / 0.1
MPSZ1040S-R68□	0.68	20%	15	30	2.5	3	100K / 0.1
MPSZ1040S-R82□	0.82	20%	14	26	3.1	3.5	100K / 0.1
MPSZ1040S-1R0□	1	20%	13	25	3.4	4	100K / 0.1
MPSZ1040S-1R5□	1.5	20%	12	24	4.7	5.4	100K / 0.1
MPSZ1040S-2R2□	2.2	20%	10	20	7.6	9	100K / 0.1
MPSZ1040S-3R3□	3.3	20%	9	16	10.8	12	100K / 0.1
MPSZ1040S-4R7□	4.7	20%	7	13	15.5	18	100K / 0.1
MPSZ1040S-5R6□	5.6	20%	6	12	21	25	100K / 0.1
MPSZ1040S-6R8□	6.8	20%	6	11	23	27	100K / 0.1
MPSZ1040S-8R2□	8.2	20%	5	10	30	34	100K / 0.1
MPSZ1040S-100□	10	20%	5	10	34	38	100K / 0.1

. Electrical Characteristics MPSZ1045S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1045S-150□	15	20%	4	8	52	60	100K / 0.1
MPSZ1045S-220□	22	20%	3	6	66	75	100K / 0.1
MPSZ1045S-330□	33	20%	2.5	5	81	92	100K / 0.1
MPSZ1045S-470□	47	20%	2	4	134	145	100K / 0.1

. Electrical Characteristics MPSZ1050S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1050S-680□	68	20%	1.5	3	171	190	100K / 0.1
MPSZ1050S-101□	100	20%	1	2	268	290	100K / 0.1

. Electrical Characteristics MPSZ1240S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1240S-R22□	0.22	20%	23	45	1.4	1.7	100K / 0.1
MPSZ1240S-R33□	0.33	20%	19	38	1.7	3.3	100K / 0.1
MPSZ1240S-R47□	0.47	20%	17	34	2	2.4	100K / 0.1
MPSZ1240S-R56□	0.56	20%	16	32	2.2	2.6	100K / 0.1
MPSZ1240S-R68□	0.68	20%	15	30	2.4	2.9	100K / 0.1
MPSZ1240S-1R0□	1	20%	14	27	2.7	3.2	100K / 0.1
MPSZ1240S-1R5□	1.5	20%	13	25	3.7	4.1	100K / 0.1
MPSZ1240S-2R2□	2.2	20%	11	22	5.6	6.7	100K / 0.1
MPSZ1240S-3R3□	3.3	20%	10	20	7.4	8.1	100K / 0.1
MPSZ1240S-4R7□	4.7	20%	9	18	11.2	13	100K / 0.1
MPSZ1240S-5R6□	5.6	20%	8	16	14.5	17.4	100K / 0.1
MPSZ1240S-6R8□	6.8	20%	7	14	18.6	22.2	100K / 0.1
MPSZ1240S-100□	10	20%	5	10	26	31	100K / 0.1
MPSZ1240S-200□	20	20%	4	7	42	50	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ1250S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1250S-R36□	0.36	20%	30	55	1	1.2	100K / 0.1
MPSZ1250S-R47□	0.47	20%	28	50	1.2	1.4	100K / 0.1
MPSZ1250S-R56□	0.56	20%	25	45	1.3	1.6	100K / 0.1
MPSZ1250S-R68□	0.68	20%	22	40	1.7	2.1	100K / 0.1
MPSZ1250S-R82□	0.82	20%	18	35	1.9	2.3	100K / 0.1
MPSZ1250S-1R0□	1	20%	16	32	2.3	2.7	100K / 0.1
MPSZ1250S-1R2□	1.2	20%	16	30	2.6	3	100K / 0.1
MPSZ1250S-1R5□	1.5	20%	14	27	3.7	4.1	100K / 0.1
MPSZ1250S-2R2□	2.2	20%	13	25	4.9	5.5	100K / 0.1
MPSZ1250S-3R3□	3.3	20%	12	22	6.1	6.9	100K / 0.1
MPSZ1250S-4R7□	4.7	20%	10	18	7.5	9	100K / 0.1
MPSZ1250S-5R6□	5.6	20%	9	18	13.6	16	100K / 0.1
MPSZ1250S-6R8□	6.8	20%	8	15	15.7	18.5	100K / 0.1
MPSZ1250S-8R2□	8.2	20%	7	13	18.4	24	100K / 0.1
MPSZ1250S-100□	10	20%	7.5	12.5	20	25.5	100K / 0.1

. Electrical Characteristics MPSZ1260S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1260S-4R7□	4.7	20%	12	25	8.4	9.5	100K / 0.1
MPSZ1260S-5R6□	5.6	20%	11	20	9.1	10	100K / 0.1
MPSZ1260S-6R8□	6.8	20%	9	18	10.1	11	100K / 0.1
MPSZ1260S-8R2□	8.2	20%	8.5	16	10.6	12	100K / 0.1

. Electrical Characteristics MPSZ1265S Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1265S-100□	10	20%	8	14	12	15	100K / 0.1
MPSZ1265S-150□	15	20%	7.5	13	19	24	100K / 0.1
MPSZ1265S-220□	22	20%	6	11	27	35	100K / 0.1
MPSZ1265S-330□	33	20%	6	9	42	52	100K / 0.1
MPSZ1265S-470□	47	20%	4	7	50	62	100K / 0.1
MPSZ1265S-680□	68	20%	3	5.5	95.5	115	100K / 0.1
MPSZ1265S-820□	82	20%	2.5	4.5	101	90	100K / 0.1
MPSZ1265S-101□	100	20%	2	3.5	110	125	100K / 0.1

High Curent Inductor / MPSZ Type

. Electrical Characteristics MPSZ1770H Type

Part No.	Inductance (uH)	Tolerance (±%)	Irms (Amp) Typ.	Isat (Amp) Typ.	DCR (mΩ)		Test Frequency (Hz / V)
					Typ.	Max.	
MPSZ1770H-1R5□	1.5	20%	23	45	1.45	1.85	100K / 0.1
MPSZ1770H-2R2□	2.2	20%	20	40	2.5	3.2	100K / 0.1
MPSZ1770H-4R7□	4.7	20%	15	30	3.4	4.12	100K / 0.1
MPSZ1770H-6R8□	6.8	20%	13	26	5.8	6.55	100K / 0.1
MPSZ1770H-8R2□	8.2	20%	12	24	8.1	9.5	100K / 0.1
MPSZ1770H-100□	10	20%	11	22	9.8	11	100K / 0.1
MPSZ1770H-150□	15	20%	10	20	14.5	15.5	100K / 0.1
MPSZ1770H-220□	22	20%	7	14	20.5	28	100K / 0.1
MPSZ1770H-330□	33	20%	6	12	34	45	100K / 0.1
MPSZ1770H-470□	47	20%	5	10	41	55	100K / 0.1
MPSZ1770H-680□	68	20%	5	9	69	80	100K / 0.1
MPSZ1770H-820□	82	20%	4.5	8	89	96	100K / 0.1
MPSZ1770H-101□	100	20%	4	7	104	115	100K / 0.1

NOTE:

1. All test data is referenced to 25℃ ambient.
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 -35℃ to 125℃.
5. The Part temperature (ambient + △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.
7. □Tolerance : J=±5 % , K=±10% , M=±20%, N=±30%

High Curent Inductor / MPSZ Type

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

1. Mechanical Reliablilty

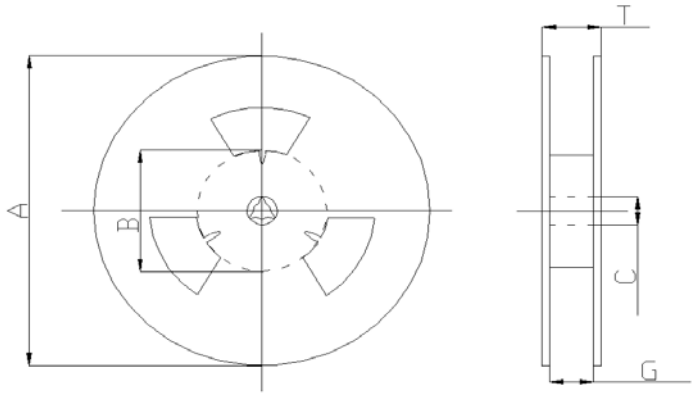
Item	Conditions	Specification
Solderability	Solder heat proof: Preheating: 180 ±10℃ 90 seconds Soldering: 255 ±5℃ for 3 ±1 sec	The surface of terminal/pin tested shall be covered with new solder by 95%
Shock	Drop down with 981m/s2 (100G) shock Attitude upon a rubber block method shock testing machinem, 3 tests	Inductance change within ± 5% Without mechanical damage.
Vibration	Vibration frequency: 10Hz to 55Hz to 10Hz 60, seconds cycle Vibration time: 2 hours	Inductance change within ± 5% Without mechanical damage.

2. Endurance Reliablilty

Thermal Shock	-25℃, mins) -> room temp. mins)→ 125℃, (30 mins) -> room temp. (5 mins) 100 cycles	Inductance change within ± 5% Without mechanical damage.
Heat Resistance	Apply IDC current @ 85℃ ambient Duration: 1000 hrs	Inductance change within ± 5% Without mechanical damage.
Humidity Resistance	Apply IDC current @ 60℃ ambient Humidity: 90~95% Duration: 1000 hrs	Inductance change within ± 5% Without mechanical damage.
Low Temp Storing	Storing Temp. -35 ±2 ℃ for total 1,000 +4/-0 hours	Inductance change within ± 5% Without mechanical damage.
High Temp. Storing	Storing Temp. 125 ±2 ℃ for total 1,000 +4/-0 hours	Inductance change within ± 5% Without mechanical damage.

High Curent Inductor / MPSZ Type

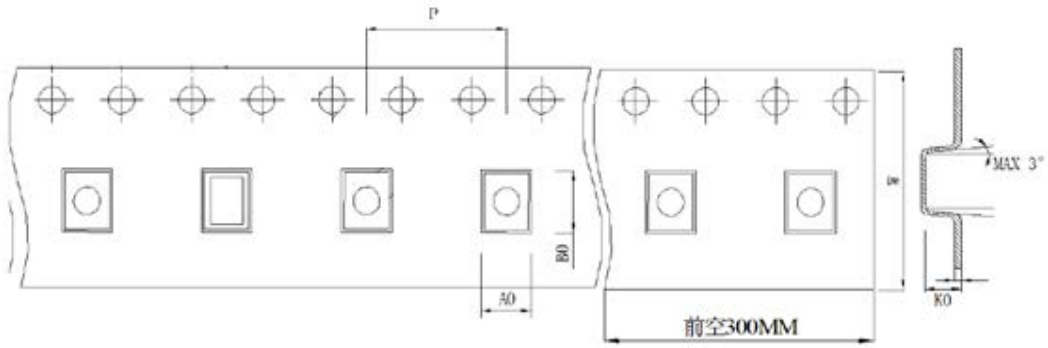
.Reel Dimension(m/m)



TYPE	Dimensions in (mm)					Reel Packing Unit
	A	B	C	G	T	PCS / REEL
MPSZ0420T	330	100	13	12	16	4000
MPSZ0520T	330	100	13	16	20	3000
MPSZ0530H	330	100	13	16	20	2000
MPSZ0612H	330	100	13	16	20	3000
MPSZ0620T	330	100	13	16	20	2000
MPSZ0624S	330	100	13	16	20	2000
MPSZ0630H	330	100	13	16	20	1500
MPSZ0640S	330	100	13	16	20	1000
MPSZ0650S	330	100	13	16	20	1000
MPSZ1040S	330	100	13	24	28	1000
MPSZ1045S	330	100	13	24	28	800
MPSZ1050S	330	100	13	24	28	800
MPSZ1240S	330	100	13	24	28	500
MPSZ1250S	330	100	13	24	28	500
MPSZ1260S	330	100	13	24	28	500
MPSZ1265S	330	100	13	24	28	400
MPSZ1770H	330	100	13	32	36	300

High Curent Inductor / MPSZ Type

.Taping Dimension(m/m)



TYPE	Dimensions in (mm)				
	W	P	B0	A0	K0
MPSZ0420T	12	8	5	4.4	2.1
MPSZ0520T	16	12	6.2	5.8	2.1
MPSZ0530H	16	12	6.2	5.8	3.1
MPSZ0612H	16	12	8	7.2	1.3
MPSZ0620H	16	12	8	7.2	2.1
MPSZ0624S	16	12	8	7.2	2.5
MPSZ0630H	16	12	8	7.2	3.1
MPSZ0640S	16	12	8	7.2	4.1
MPSZ0650S	16	12	8	7.2	5.1
MPSZ1040S	24	16	10.8	7.2	4.1
MPSZ1045S	24	16	10.8	7.2	4.6
MPSZ1050S	24	16	10.8	7.2	5.1
MPSZ1240S	24	20	14.2	13.3	4.1
MPSZ1250S	24	20	14.2	13.3	5.1
MPSZ1260S	24	20	14.2	13.3	6.1
MPSZ1265S	24	20	14.2	13.3	6.6
MPSZ1770H	32	24	18	17.2	7.1