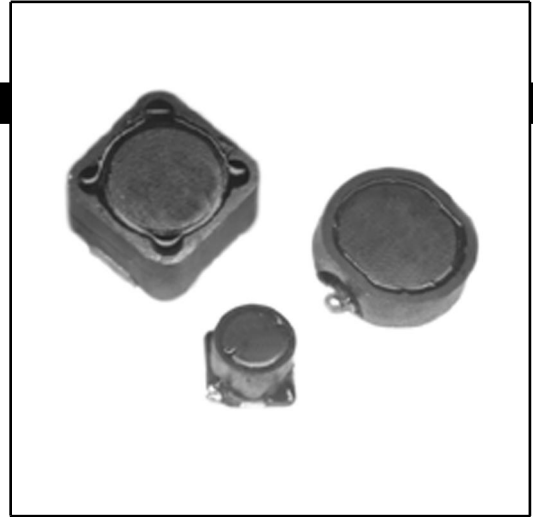


LSMS Switchmode Inductors Shielded Surface Mount

Features:

- High DC current bias capability
- Low radiated field due to shielded design
- 120° rating (ambient plus rise)
- Used for output and EMI inductor applications
- Very low profiles available



How to choose your model:

- 1) Calculate the energy storage needed based on inductance and current
- 2) No de-rating needed for ambients up to 80° C

Figure 1

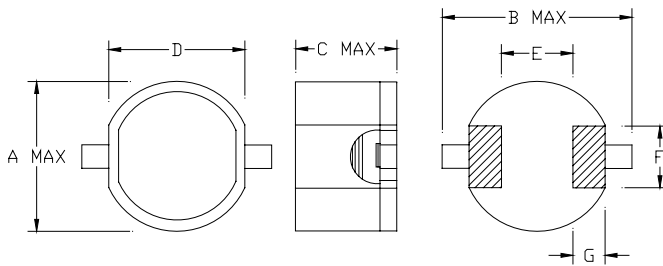


Figure 2

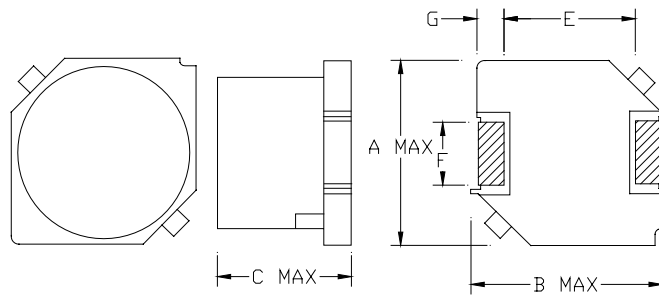
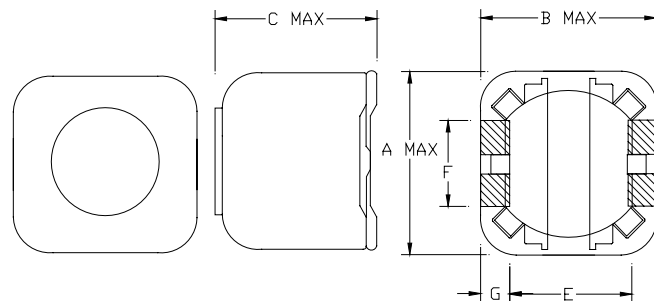


Figure 3



LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Data on Page		A MAX	B MAX	C MAX	D NOM	E NOM	F NOM	G NOM
LSMS-12080-xxxx	1	3	mm in	8.10 .319	11.8 .465	4.70 .185	7.00 .276	4.20 .165	3.00 .118	1.50 .059
LSMS-13100-xxxx	1	3	mm in	10.3 .406	13.0 .512	5.00 .197	9.00 .354	5.00 .197	3.00 .118	2.00 .079
LSMS-16130-xxxx	1	4	mm in	12.9 .508	15.8 .622	5.00 .197	11.6 .457	7.60 .299	3.00 .118	2.00 .079
LSMS-07070-xxxx	2	5	mm in	7.40 .291	7.40 .291	3.80 .150	-- --	5.60 .220	2.00 .079	0.85 .035
LSMS-07071-xxxx	2	5	mm in	7.40 .291	7.40 .291	5.20 .205	-- --	5.60 .220	2.00 .079	0.85 .035
LSMS-08080-xxx	3	6	mm in	7.50 .295	7.50 .295	3.50 .138	-- --	5.08 .200	2.00 .079	1.10 .043
LSMS-08081-xxx	3	6	mm in	7.50 .295	7.50 .295	4.50 .177	-- --	5.08 .200	2.00 .079	1.10 .043
LSMS-12120-xxx	3	7	mm in	12.5 .492	12.5 .492	6.20 .244	-- --	7.60 .299	5.00 .197	2.00 .079
LSMS-12121-xxx	3	7	mm in	12.5 .492	12.5 .492	8.00 .315	-- --	7.60 .299	5.00 .197	2.00 .079

LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Inductance [uH ± 20%] (note 1)	DC Resistance [Ohms Max]	Rated Current [Amps] (note 2)	Energy Storage [uJoules] (note 3)
LSMS-12080-0100	1	10	0.055	1.7	13.0
LSMS-12080-0120	1	12	0.064	1.6	13.8
LSMS-12080-0150	1	15	0.07	1.5	15.2
LSMS-12080-0180	1	18	0.08	1.4	15.9
LSMS-12080-0220	1	22	0.10	1.2	14.3
LSMS-12080-0270	1	27	0.12	1.1	14.7
LSMS-12080-0330	1	33	0.14	1.0	15.5
LSMS-12080-0390	1	39	0.15	0.94	15.5
LSMS-12080-0470	1	47	0.19	0.86	15.6
LSMS-12080-0560	1	56	0.23	0.78	15.3
LSMS-12080-0680	1	68	0.26	0.73	16.3
LSMS-12080-0820	1	82	0.31	0.68	17.0
LSMS-12080-0101	1	100	0.41	0.60	16.2
LSMS-12080-0121	1	120	0.49	0.56	16.9
LSMS-12080-0151	1	150	0.66	0.50	16.9
LSMS-12080-0181	1	180	0.78	0.48	18.7
LSMS-12080-0221	1	220	1.00	0.46	20.9
LSMS-12080-0271	1	270	1.30	0.40	19.4

Precision Model Number	Figure Number	Inductance [uH ± 20%] (note 1)	DC Resistance [Ohms Max]	Rated Current [Amps] (note 2)	Energy Storage [uJoules] (note 3)
LSMS-13100-0100	1	10	0.030	2.5	28.1
LSMS-13100-0120	1	12	0.035	2.3	28.6
LSMS-13100-0150	1	15	0.040	2.1	29.8
LSMS-13100-0180	1	18	0.052	1.9	29.2
LSMS-13100-0220	1	22	0.058	1.7	28.6
LSMS-13100-0270	1	27	0.074	1.6	31.1
LSMS-13100-0330	1	33	0.081	1.4	29.1
LSMS-13100-0390	1	39	0.10	1.3	29.7
LSMS-13100-0470	1	47	0.12	1.2	30.5
LSMS-13100-0560	1	56	0.15	1.1	30.5
LSMS-13100-0680	1	68	0.18	0.97	28.8
LSMS-13100-0820	1	82	0.20	0.88	28.6
LSMS-13100-0101	1	100	0.26	0.80	28.8
LSMS-13100-0121	1	120	0.30	0.73	28.8
LSMS-13100-0151	1	150	0.36	0.65	28.5
LSMS-13100-0181	1	180	0.45	0.60	29.2
LSMS-13100-0221	1	220	0.50	0.54	28.9
LSMS-13100-0271	1	270	0.60	0.49	29.2
LSMS-13100-0331	1	330	0.75	0.44	28.8
LSMS-13100-0391	1	390	0.89	0.41	29.5

Note 1: Inductance measured at 100KHz, 0.1 Vrms, without DC current

Note 2: Rated DC current at which inductance will be decreased by 10% from its initial value or the DC current at a temperature rise of 40°C, whichever is smaller

Note 3: Energy Storage is calculated using the rated current

LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Inductance [uH ± 20%] (note 1)	DC Resistance [Ohms Max]	Rated Current [Amps] (note 2)	Energy Storage [uJoules] (note 3)
LSMS-16130-0100	1	10	0.039	2.5	28.1
LSMS-16130-0120	1	12	0.042	2.4	31.1
LSMS-16130-0150	1	15	0.051	2.3	35.7
LSMS-16130-0180	1	18	0.054	2.2	39.2
LSMS-16130-0220	1	22	0.062	2.1	43.7
LSMS-16130-0270	1	27	0.066	2.0	48.6
LSMS-16130-0330	1	33	0.073	1.9	53.6
LSMS-16130-0390	1	39	0.83	1.8	56.9
LSMS-16130-0470	1	47	0.11	1.6	54.1
LSMS-16130-0560	1	56	0.12	1.4	49.4
LSMS-16130-0680	1	68	0.14	1.3	51.7
LSMS-16130-0820	1	82	0.17	1.2	53.1
LSMS-16130-0101	1	100	0.20	1.1	54.5
LSMS-16130-0121	1	120	0.25	0.97	50.8
LSMS-16130-0151	1	150	0.30	0.86	49.9
LSMS-16130-0181	1	180	0.36	0.84	57.2
LSMS-16130-0221	1	220	0.43	0.72	51.3
LSMS-16130-0271	1	270	0.53	0.65	51.3
LSMS-16130-0331	1	330	0.59	0.61	55.3
LSMS-16130-0391	1	390	0.72	0.58	59.0
LSMS-16130-0471	1	470	0.81	0.50	52.9
LSMS-16130-0561	1	560	0.98	0.48	58.0
LSMS-16130-0681	1	680	1.16	0.43	56.6
LSMS-16130-0821	1	820	1.42	0.38	53.3
LSMS-16130-0102	1	1000	1.90	0.35	55.1
LSMS-16130-0122	1	1200	2.15	0.32	55.3

Note 1: Inductance measured at 100KHz, 0.1 Vrms, without DC current

Note 2: Rated DC current at which inductance will be decreased by 10% from its initial value or the DC current at a temperature rise of 40°C, whichever is smaller

Note 3: Energy Storage is calculated using the rated current

LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Inductance [uH ± 20%] <i>(note 1)</i>	DC Resistance [Ohms Max]	Rated Current [Amps] <i>(note 2)</i>	Energy Storage [uJoules] <i>(note 3)</i>
LSMS-07070-0100	2	10	0.14	1.00	4.50
LSMS-07070-0120	2	12	0.16	0.94	4.77
LSMS-07070-0150	2	15	0.18	0.86	4.99
LSMS-07070-0180	2	18	0.25	0.78	4.93
LSMS-07070-0220	2	22	0.32	0.76	5.72
LSMS-07070-0270	2	27	0.36	0.64	4.98
LSMS-07070-0330	2	33	0.41	0.61	5.53
LSMS-07070-0390	2	39	0.47	0.53	4.93
LSMS-07070-0470	2	47	0.51	0.50	5.29
LSMS-07070-0560	2	56	0.72	0.46	5.33
LSMS-07070-0680	2	68	0.82	0.42	5.40
LSMS-07070-0820	2	82	0.90	0.40	5.90
LSMS-07070-0101	2	100	0.95	0.36	5.83
LSMS-07070-0121	2	120	1.10	0.32	5.53
LSMS-07070-0151	2	150	1.25	0.28	5.29
LSMS-07070-0181	2	180	1.30	0.26	5.48
LSMS-07070-0221	2	220	1.50	0.24	5.70
LSMS-07070-0271	2	270	2.10	0.22	5.88

Precision Model Number	Figure Number	Inductance [uH ± 20%] <i>(note 1)</i>	DC Resistance [Ohms Max]	Rated Current [Amps] <i>(note 2)</i>	Energy Storage [uJoules] <i>(note 3)</i>
LSMS-07071-0100	2	10	0.07	1.65	12.3
LSMS-07071-0120	2	12	0.08	1.50	12.2
LSMS-07071-0150	2	15	0.09	1.34	12.1
LSMS-07071-0180	2	18	0.11	1.22	12.1
LSMS-07071-0220	2	22	0.12	1.10	12.0
LSMS-07071-0270	2	27	0.17	1.00	12.2
LSMS-07071-0330	2	33	0.19	0.90	12.0
LSMS-07071-0390	2	39	0.21	0.83	12.1
LSMS-07071-0470	2	47	0.24	0.75	11.9
LSMS-07071-0560	2	56	0.32	0.69	12.0
LSMS-07071-0680	2	68	0.37	0.63	12.2
LSMS-07071-0820	2	82	0.40	0.57	12.0
LSMS-07071-0101	2	100	0.54	0.52	12.2
LSMS-07071-0121	2	120	0.62	0.47	11.9
LSMS-07071-0151	2	150	0.86	0.42	11.9
LSMS-07071-0181	2	180	0.97	0.38	11.7
LSMS-07071-0221	2	220	1.31	0.35	12.1
LSMS-07071-0271	2	270	1.46	0.31	11.7

Note 1: Inductance measured at 100KHz, 0.1 Vrms, without DC current

Note 2: Rated DC current at which inductance will be decreased by 10% from its initial value or the DC current at a temperature rise of 40°C, whichever is smaller

Note 3: Energy Storage is calculated using the rated current

LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Inductance [uH ± 20%] (note 1)	DC Resistance [Ohms Max]	Rated Current [Amps] (note 2)	Energy Storage [uJoules] (note 3)
LSMS-08080-0100	3	10	0.072	1.68	12.7
LSMS-08080-0120	3	12	0.098	1.52	12.5
LSMS-08080-0150	3	15	0.13	1.33	12.0
LSMS-08080-0180	3	18	0.14	1.20	11.7
LSMS-08080-0220	3	22	0.19	1.07	11.4
LSMS-08080-0270	3	27	0.21	0.96	11.2
LSMS-08080-0330	3	33	0.24	0.91	12.3
LSMS-08080-0390	3	39	0.32	0.77	10.4
LSMS-08080-0470	3	47	0.36	0.76	12.2
LSMS-08080-0560	3	56	0.47	0.68	11.7
LSMS-08080-0680	3	68	0.52	0.61	11.4
LSMS-08080-0820	3	82	0.69	0.57	12.0
LSMS-08080-0101	3	100	0.79	0.50	11.3
LSMS-08080-0121	3	120	0.89	0.49	13.0
LSMS-08080-0151	3	150	1.27	0.43	12.5
LSMS-08080-0181	3	180	1.45	0.39	12.3
LSMS-08080-0221	3	220	1.65	0.35	12.1
LSMS-08080-0271	3	270	2.31	0.32	12.4
LSMS-08080-0331	3	330	2.62	0.28	11.7
LSMS-08080-0391	3	390	2.94	0.26	11.9
LSMS-08080-0471	3	470	4.18	0.24	12.2
LSMS-08080-0561	3	560	4.67	0.22	12.2
LSMS-08080-0681	3	680	5.73	0.19	11.1
LSMS-08080-0821	3	820	6.54	0.18	12.0
LSMS-08080-0102	3	1000	9.44	0.16	11.5

Precision Model Number	Figure Number	Inductance [uH ± 20%] (note 1)	DC Resistance [Ohms Max]	Rated Current [Amps] (note 2)	Energy Storage [uJoules] (note 3)
LSMS-08081-0100	3	10	0.060	1.84	15.2
LSMS-08081-0120	3	12	0.070	1.71	15.8
LSMS-08081-0150	3	15	0.092	1.47	14.6
LSMS-08081-0180	3	18	0.10	1.31	13.9
LSMS-08081-0220	3	22	0.11	1.23	15.0
LSMS-08081-0270	3	27	0.15	1.12	15.2
LSMS-08081-0330	3	33	0.17	0.96	13.7
LSMS-08081-0390	3	39	0.23	0.91	14.5
LSMS-08081-0470	3	47	0.26	0.88	16.4
LSMS-08081-0560	3	56	0.35	0.75	14.2
LSMS-08081-0680	3	68	0.38	0.69	14.6
LSMS-08081-0820	3	82	0.43	0.61	13.8
LSMS-08081-0101	3	100	0.61	0.60	16.2
LSMS-08081-0121	3	120	0.66	0.52	14.6
LSMS-08081-0151	3	150	0.88	0.46	14.3
LSMS-08081-0181	3	180	0.98	0.42	14.3
LSMS-08081-0221	3	220	1.17	0.36	12.9
LSMS-08081-0271	3	270	1.64	0.34	14.0
LSMS-08081-0331	3	330	1.86	0.32	15.2
LSMS-08081-0391	3	390	2.85	0.29	14.8
LSMS-08081-0471	3	470	3.01	0.26	14.3
LSMS-08081-0561	3	560	3.62	0.23	13.3
LSMS-08081-0681	3	680	4.63	0.22	14.8
LSMS-08081-0821	3	820	5.20	0.20	14.8
LSMS-08081-0102	3	1000	6.00	0.18	14.6

Note 1: Inductance measured at 100KHz, 0.1 Vrms, without DC current

Note 2: Rated DC current at which inductance will be decreased by 10% from its initial value or the DC current at a temperature rise of 40°C, whichever is smaller

Note 3: Energy Storage is calculated using the rated current

LSMS Switchmode Inductors Shielded Surface Mount

Precision Model Number	Figure Number	Inductance [uH ± 20%] <i>(note 1)</i>	DC Resistance [Ohms Max]	Rated Current [Amps] <i>(note 2)</i>	Energy Storage [uJoules] <i>(note 3)</i>
LSMS-12120-0100	3	10	0.025	4.00	72.0
LSMS-12120-0120	3	12	0.027	3.50	66.2
LSMS-12120-0150	3	15	0.030	3.30	73.5
LSMS-12120-0180	3	18	0.038	3.00	72.9
LSMS-12120-0220	3	22	0.045	2.80	77.6
LSMS-12120-0270	3	27	0.055	2.30	64.3
LSMS-12120-0330	3	33	0.063	2.10	65.5
LSMS-12120-0390	3	39	0.075	2.00	70.2
LSMS-12120-0470	3	47	0.085	1.80	68.5
LSMS-12120-0560	3	56	0.11	1.70	72.8
LSMS-12120-0680	3	68	0.12	1.50	68.9
LSMS-12120-0820	3	82	0.14	1.40	72.3
LSMS-12120-0101	3	100	0.17	1.30	76.0
LSMS-12120-0121	3	120	0.20	1.10	65.3
LSMS-12120-0151	3	150	0.25	1.00	67.5
LSMS-12120-0181	3	180	0.29	0.90	65.6
LSMS-12120-0221	3	220	0.40	0.80	63.4
LSMS-12120-0271	3	270	0.46	0.75	68.4
LSMS-12120-0331	3	330	0.51	0.68	68.7
LSMS-12120-0391	3	390	0.69	0.65	74.1
LSMS-12120-0471	3	470	0.77	0.58	71.1
LSMS-12120-0561	3	560	0.88	0.54	73.5
LSMS-12120-0681	3	680	1.20	0.48	70.5
LSMS-12120-0821	3	820	1.34	0.43	68.2
LSMS-12120-0102	3	1000	1.53	0.40	72.0

Precision Model Number	Figure Number	Inductance [uH ± 20%] <i>(note 1)</i>	DC Resistance [Ohms Max]	Rated Current [Amps] <i>(note 2)</i>	Energy Storage [uJoules] <i>(note 3)</i>
LSMS-12121-02R4	3	2.4	0.012	8.00	69.1
LSMS-12121-04R7	3	4.7	0.016	6.80	97.8
LSMS-12121-07R6	3	7.6	0.020	5.90	119
LSMS-12121-0100	3	10	0.022	5.40	131
LSMS-12121-0120	3	12	0.025	4.90	130
LSMS-12121-0150	3	15	0.027	4.50	137
LSMS-12121-0180	3	18	0.039	3.90	123
LSMS-12121-0220	3	22	0.043	3.60	128
LSMS-12121-0270	3	27	0.046	3.40	140
LSMS-12121-0330	3	33	0.065	3.00	134
LSMS-12121-0390	3	39	0.073	2.75	133
LSMS-12121-0470	3	47	0.10	2.50	132

Note 1: Inductance measured at 100KHz, 0.1 Vrms, without DC current

Note 2: Rated DC current at which inductance will be decreased by 10% from its initial value or the DC current at a temperature rise of 40°C, whichever is smaller

Note 3: Energy Storage is calculated using the rated current