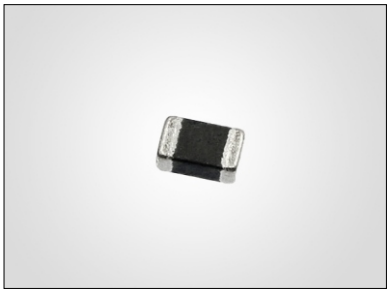
Multilayer High Current Chip Inductors - MCLS Series

MEISONGBEI



Features

- Compact size inductor possible
- Monolithic structure for high reliability
- No cross coupling due to magnetic shield
- Excellent solderability and high heat resistance for reflow soldering or wave soldering.

General Specifications

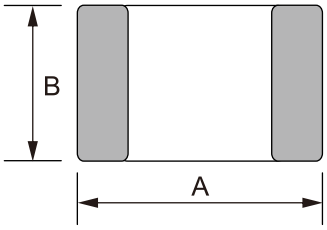
- Operating temp range: -55°C to +125°C
- Storage temp range: -40°C to +85°C

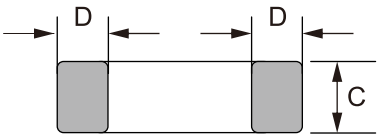
Applications

- Communications
- Personal computers
- Remote control
- Video and audio

RoHS COMPLIANT | REACH COMPLIANT | Halogen Free

Dimensions & Configurations (Unit:mm)





Type	A	B	C	D
MCLS1608 (0603)	1.6±0.15	0.8±0.15	0.5±0.15 0.8±0.15	0.3±0.2
MCLS2012 (0805)	2.0 +0.3/-0.1	1.25±0.2	0.9±0.2 1.25±0.2	0.5±0.3
MCLS2016 (0806)	2.0 +0.3/-0.1	1.6±0.15	0.9±0.2	0.5±0.3
MCLS2520 (1008)	2.5±0.2	2.0 +0.3/-0.1	0.9±0.2 1.1±0.2	0.5±0.3
MCLS3216 (1206)	3.2±0.2	1.6±0.2	0.9±0.2	0.5±0.3

Electrical Characteristics For MCLS1608 Series

Part Number	Inductance [uH]	L Test Freq [MHz]	SRF(min) [MHz]	DCR [Ω]	IDC(max) [mA]	Thickness [mm]
MCLS1608-R47M-0.9A	0.47	5	105	0.19±25%	900	0.5±0.15
MCLS1608-R47M-1.2A	0.47	5	105	0.12±25%	1200	0.8±0.15
MCLS1608-R47M-0.8A	0.47	5	105	0.25±25%	800	0.8±0.15
MCLS1608-R68M-1A	0.68	5	90	0.16±25%	1000	0.8±0.15
MCLS1608-1R0M-0.95A	1.0	1	75	0.20±25%	950	0.8±0.15
MCLS1608-1R5M-0.8A	1.5	1	50	0.25±25%	800	0.8±0.15
MCLS1608-2R2M-0.75A	2.2	1	40	0.30±25%	750	0.8±0.15
MCLS1608-2R2M-1A	2.2	1	80	0.20 max	1000	0.8±0.15

Electrical Characteristics For MCLS2012 Series

Part Number	Inductance [uH]	L Test Freq [MHz]	SRF(min) [MHz]	DCR [Ω]	IDC(max) [mA]	Thickness [mm]
MCLS2012-R47M-1.1A	0.47	1	100	0.12±25%	1100	0.9±0.2
MCLS2012-1R0M-0.8A	1.0	1	60	0.19±25%	800	0.9±0.2
MCLS2012-1R5M-0.7A	1.5	1	50	0.26±25%	700	0.9±0.2
MCLS2012-2R2M-0.6A	2.2	1	40	0.34±25%	600	0.9±0.2
MCLS2012-R47M-1.2A	0.47	1	100	0.09±25%	1200	0.9±0.2
MCLS2012-1R0M-1.0A	1.0	1	60	0.11±25%	1000	0.9±0.2
MCLS2012-1R5M-0.9A	1.5	1	50	0.16±25%	900	0.9±0.2
MCLS2012-2R2M-0.8A	2.2	1	40	0.25±25%	800	0.9±0.2
MCLS2012-3R3M-0.9A	3.3	1	30	0.19±25%	900	0.9±0.2
MCLS2012-4R7M-0.8A	4.7	1	30	0.25±25%	800	0.9±0.2
MCLS2012-2R2M-0.5A	2.2	1	40	0.45±25%	500	0.9±0.2
MCLS2012-2R2M-0.64A	2.2	1	40	0.33±30%	640	1.25±0.2
MCLS2012-4R7M-0.6A	4.7	1	25	0.50±30%	600	1.25±0.2

Electrical Characteristics For MCLS2016 Series

Part Number	Inductance [uH]	L Test Freq [MHz]	SRF(min) [MHz]	DCR [Ω]	IDC(max) [mA]	Thickness [mm]
MCLS2016-R47M-1.6A	0.47	1	100	0.06±25%	1600	0.9±0.2
MCLS2016-1R0M-1.4A	1.0	1	70	0.09±25%	1400	0.9±0.2
MCLS2016-1R5M-1.2A	1.5	1	60	0.11±25%	1200	0.9±0.2
MCLS2016-2R2M-1.2A	2.2	1	50	0.11±25%	1200	0.9±0.2
MCLS2016-3R3M-1.2A	3.3	1	40	0.12±25%	1200	0.9±0.2
MCLS2016-4R7M-1.1A	4.7	1	30	0.14±25%	1100	0.9±0.2

Electrical Characteristics For MCLS2520 Series

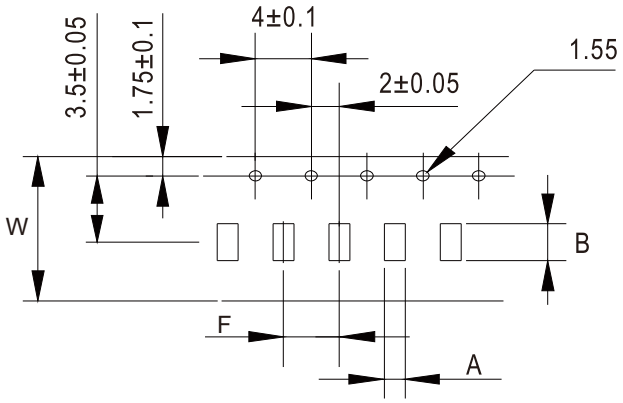
Part Number	Inductance [uH]	L Test Freq [MHz]	SRF(min) [MHz]	DCR [Ω]	IDC(max) [mA]	Thickness [mm]
MCLS2520-R47M-1.8A	0.47	1	100	0.04±25%	1800	0.9±0.2
MCLS2520-1R0M-1.6A	1.0	1	60	0.06±25%	1600	0.9±0.2
MCLS2520-1R5M-1.5A	1.5	1	50	0.07±25%	1500	0.9±0.2
MCLS2520-2R2M-1.3A	2.2	1	40	0.08±25%	1300	0.9±0.2
MCLS2520-3R3M-1.2A	3.3	1	30	0.10±25%	1200	0.9±0.2
MCLS2520-4R7M-1.1A	4.7	1	25	0.11±25%	1100	0.9±0.2
MCLS2520-1R0M-1.5A	1.0	1	70	0.09±25%	1500	1.1±0.2
MCLS2520-2R2M-1.0A	2.2	1	40	0.12±25%	1000	1.1±0.2
MCLS2520-3R3M-1.0A	3.3	1	30	0.12±25%	1000	1.1±0.2
MCLS2520-4R7M-0.9A	4.7	1	25	0.14±25%	900	1.1±0.2
MCLS2520-100M-0.8A	10	1	15	0.30±30%	800	1.1±0.2

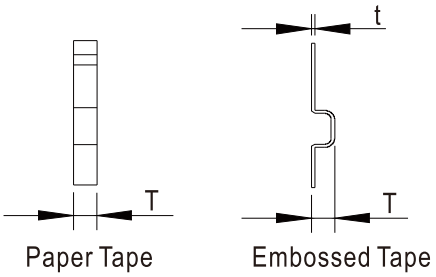
Electrical Characteristics For MCLS3216 Series

Part Number	Inductance [uH]	L Test Freq [MHz]	SRF(min) [MHz]	DCR(max) [Ω]	IDC(max) [mA]	Thickness [mm]
MCLS3216-1R0M-1.2A	1.0	1	60	0.15	1200	0.9±0.2
MCLS3216-1R2M-1.2A	1.2	1	65	0.15	1200	0.9±0.2
MCLS3216-1R5M-1.0A	1.5	1	60	0.17	1000	0.9±0.2
MCLS3216-1R8M-0.9A	1.8	1	55	0.24	900	0.9±0.2
MCLS3216-2R2M-0.9A	2.2	1	50	0.24	900	0.9±0.2
MCLS3216-2R7M-0.8A	2.7	1	45	0.30	800	0.9±0.2
MCLS3216-3R3M-0.8A	3.3	1	41	0.30	800	0.9±0.2
MCLS3216-3R9M-0.7A	3.9	1	38	0.38	700	0.9±0.2
MCLS3216-4R7M-0.7A	4.7	1	35	0.38	700	0.9±0.2
MCLS3216-5R6M-0.5A	5.6	1	32	0.45	500	0.9±0.2
MCLS3216-6R8M-0.5A	6.8	1	29	0.45	500	0.9±0.2
MCLS3216-8R2M-0.3A	8.2	1	26	0.55	300	0.9±0.2
MCLS3216-100M-0.3A	10	1	24	0.55	300	0.9±0.2
MCLS3216-120M-0.3A	12	1	22	0.55	300	0.9±0.2
MCLS3216-150M-0.1A	15	1	19	0.65	100	0.9±0.2
MCLS3216-180M-0.1A	18	1	18	0.65	100	0.9±0.2

Tape & Reel Specifications:

Unit: mm





Type	Tape Dimensions (mm)						Tape type	Reel OD (mm)	Quantity PCS / Reel
	W	A	B	F	T	t			
MCLS1608/05	8	1.00	1.80	4.0	0.80	-	Paper Tape	178	5,000
MCLS1608/08	8	1.00	1.80	4.0	1.10	-	Paper Tape	178	4,000
MCLS2012/09	8	1.55	2.25	4.0	1.45	0.30	Embossed Tape	178	4,000
MCLS2012/12	8	1.55	2.25	4.0	1.75	0.30	Embossed Tape	178	3,000
MCLS2016/09	8	1.90	2.25	4.0	1.45	0.30	Embossed Tape	178	3,000
MCLS2520/09	8	2.30	2.80	4.0	1.45	0.30	Embossed Tape	178	3,000
MCLS2520/11	8	2.30	2.80	4.0	1.75	0.30	Embossed Tape	178	3,000
MCLS3216/09	8	1.88	3.50	4.0	1.45	0.30	Embossed Tape	178	4,000