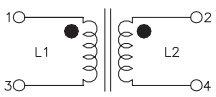
Shielded Surface Mount Inductors

MODELS HM78D1210XXXMLF

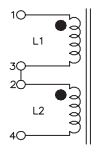
Features

- Operating Temperature Range -40°C to +125°C
- Temperature Rise, Maximum 40°C
- Ideal for SEPIC applications, high inductance, high efficiency and excellent current handling in rugged, low cost part
- Use as DC-DC converter and in applications like hand phones, CD/DVD player, digital camera, GPS system. Also used as two single inductors connected series or parallel or as 1:1 transformer
- RoHS Compliant

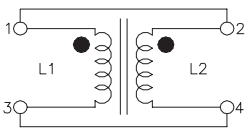
Electrical Schematic



Coupled inductor, transformer and SEPIC modes



Autotransformer and series modes



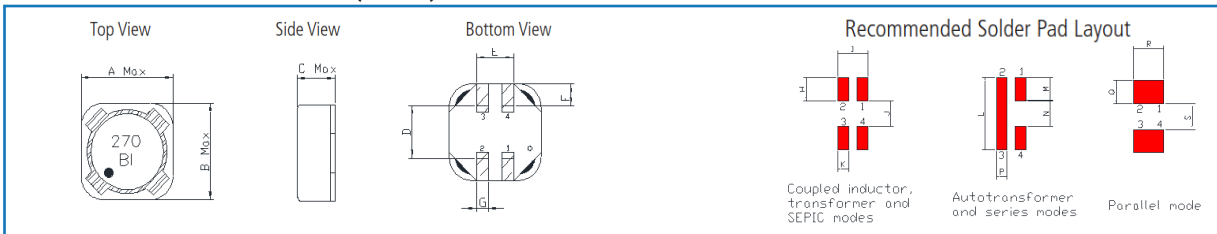
Parallel mode

Specifications @ 25°C

Leads connected in parallel						Leads connected in series				
Part Number	**L (µH)**	**DCR Max (Ω)**	**Irated (A)**	**Isat (A)**	**Irms (A)**	**L (µH)**	**DCR Max (Ω)**	**Irated (A)**	**Isat (A)**	**Irms (A)**
HM78D-12104R7MLF	4.70±20%	0.014	10.60	18.00	3.250	18.80±25%	0.056	5.30	9.00	1.625
HM78D-12106R8MLF	6.80±20%	0.017	10.40	14.20	3.100	27.20±25%	0.068	5.20	7.10	1.550
HM78D-12108R2MLF	8.20±20%	0.018	9.50	12.85	2.250	32.80±25%	0.072	4.75	6.45	1.125
HM78D-1210100MLF	10.00±20%	0.020	8.60	11.75	3.200	41.12±25%	0.080	4.30	5.85	1.600
HM78D-1210220MLF	22.00±20%	0.040	5.40	8.20	2.700	88.00±25%	0.160	2.70	4.10	1.350
HM78D-1210330MLF	33.00±20%	0.050	4.50	6.60	2.000	132.00±25%	0.200	2.25	3.30	1.000
HM78D-1210470MLF	47.00±20%	0.065	3.70	5.50	1.900	188.00±25%	0.260	1.85	2.75	0.950
HM78D-1210560MLF	56.00±20%	0.081	3.28	4.90	0.850	224.00±25%	0.324	1.64	2.45	0.425
HM78D-1210680MLF	68.00±20%	0.098	2.96	4.45	0.800	272.00±25%	0.392	1.48	2.20	0.400
HM78D-1210101MLF	100.00±20%	0.128	2.54	3.70	0.700	400.00±25%	0.512	1.27	1.85	0.350
HM78D-1210121MLF	120.00±20%	0.170	2.38	3.40	0.630	480.00±25%	0.680	1.19	1.70	0.315
HM78D-1210331MLF	330.00±20%	0.440	1.32	2.10	0.410	1320.00±25%	1.760	0.66	1.05	0.205
HM78D-1210471MLF	470.00±20%	0.570	1.22	1.80	0.300	1880.00±25%	2.280	0.61	0.90	0.150

Notes : (1) Inductance is measured at 100kHz, 0.1Vrms, 0Adc.
(2) When leads connected in parallel, DCR is half the value. When lead connected in series, DCR is twice the value
(3) Isat current is the saturation current at which inductance rolls off approximately 30% from its initial (zero DC) value.
(4) Irms equals DC current, that causes component to increase by 40°C from 25°C ambient.
(5) Irated current is the rated current at which inductance rolls off approximately 10% from its initial (zero DC) value.

Mechanical Outline (mm)



Case Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S
1210	12.5	12.5	10.5	7.0	5.0	2.5	1.7	4.2	5.5	4.5	2.0	12.8	4.2	4.5	2.0	4.2	5.5	4.5

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.

All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

BI Technologies
A-1445, Jalan Tanjung Api
25050 Kuantan
Pahang Darul Makmur
Malaysia
Ph: +60 9 565 8888 Fax: +60 9 514 3555
http://www.ttelectronics.com/magnetics/customer-service-enquiry

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Surface Mount Coupled Inductors

MODELS HM78D1210XXXMLF

Packaging

1) Tape and reel packaging.
2) 300pcs per 13" reel.

Ordering Information

HM78D-1210 XXX M LF TR

- Model Series: HM78D-1210
- Inductance Code: XXX
  First 2 digits are significant. Last digit denotes the number of trailing zeros. For values below 10uH, "R" denotes the decimal point.
- Inductance Tolerance: M
  K=±10%
  M=±20%
- Lead-Free: LF
- Tape & Reel Packing: TR

BI Technologies
A-1445, Jalan Tanjung Api
25050 Kuantan
Pahang Darul Makmur
Malaysia
Ph: +60 9 565 8888 Fax: +60 9 514 3555
http://www.ttelectronics.com/magnetics/customer-service-enquiry