

## 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

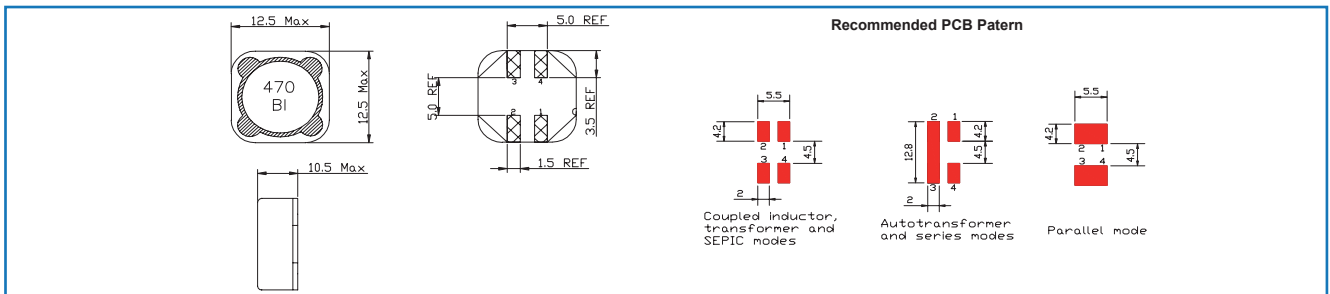


### Specifications @ 25°C

Leads connected in parallel						Leads connected in series				
Part Number	L (μH)	DCR Max (Ω)	I <sub>rated</sub> (A)	I <sub>sat</sub> (A)	I <sub>rms</sub> (A)	L (μH)	DCR Max (Ω)	I <sub>rated</sub> (A)	I <sub>sat</sub> (A)	I <sub>rms</sub> (A)
HM78D-12104R7MLF	4.70±20%	0.014	10.60	18.00	7.559	18.80±25%	0.056	5.30	9.00	3.780
HM78D-12106R8MLF	6.80±20%	0.017	10.40	14.20	6.860	27.20±25%	0.068	5.20	7.10	3.430
HM78D-12108R2MLF	8.20±20%	0.018	9.50	12.85	6.667	32.80±25%	0.072	4.75	6.45	3.333
HM78D-1210100MLF	10.00±20%	0.020	8.60	11.75	6.325	41.12±25%	0.080	4.30	5.85	3.162
HM78D-1210220MLF	22.00±20%	0.040	5.40	8.20	4.472	88.00±25%	0.160	2.70	4.10	2.236
HM78D-1210330MLF	33.00±20%	0.050	4.50	6.60	4.000	132.00±25%	0.200	2.25	3.30	2.000
HM78D-1210470MLF	47.00±20%	0.065	3.70	5.50	3.508	188.00±25%	0.260	1.85	2.75	1.754
HM78D-1210560MLF	56.00±20%	0.081	3.28	4.90	3.143	224.00±25%	0.324	1.64	2.45	1.571
HM78D-1210680MLF	68.00±20%	0.098	2.96	4.45	2.857	272.00±25%	0.392	1.48	2.20	1.429
HM78D-1210101MLF	100.00±20%	0.128	2.54	3.70	2.500	400.00±25%	0.512	1.27	1.85	1.250
HM78D-1210121MLF	120.00±20%	0.170	2.38	3.40	2.169	480.00±25%	0.680	1.19	1.70	1.085
HM78D-1210331MLF	330.00±20%	0.440	1.32	2.10	1.348	1320.00±25%	1.760	0.66	1.05	0.674
HM78D-1210471MLF	470.00±20%	0.570	1.22	1.80	1.185	1880.00±25%	2.280	0.61	0.90	0.592

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

### Mechanical Outline (mm)



### 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.

## Packaging

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

## Ordering Information



### 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.