

# Shielded Surface Mount Inductors



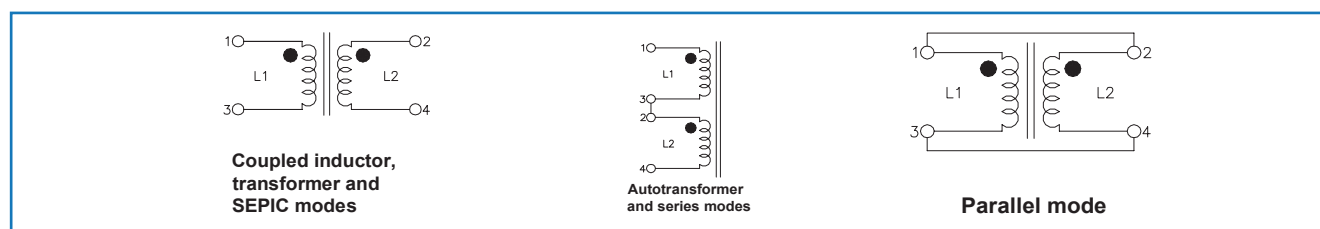
MODELS HM78D1210XXXMLF

## 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	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.  
 (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 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)

Top View			Side View			Bottom View			Recommended Solder Pad Layout									
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

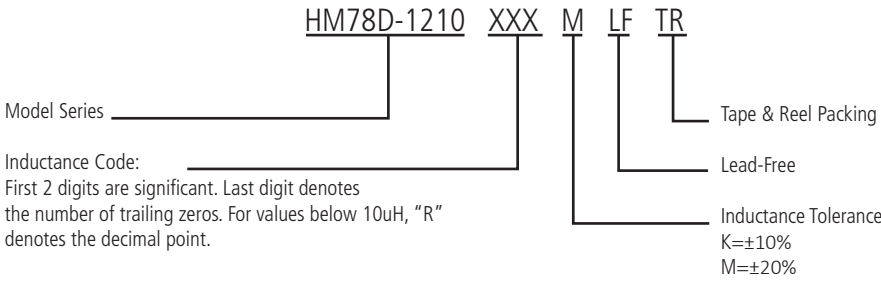
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## Packaging

- 1) Tape and reel packaging.

2) 300pcs per 13" reel.

## Ordering Information



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