

Shielded Surface Mount Coupled Inductors

Model HA78D-L128XXXLFTR

Features and Benefits

- Operating Temperature Range -50°C to +155°C
- Temperature Rise, Maximum 40°C
- AEC-Q200 CERTIFIED
- RoHS Compliant



Specifications @ 25°C

Part Number	Inductance 100kHz 0.1V (Parallel)	Inductance 100kHz 0.1V (Series)	Leakage ⁽¹⁾ Inductance 100kHz 0.1V μH TYP	Heating Current ⁽²⁾		Isat ⁽³⁾ Saturation Current Amps	DC Resistance	
	@ 0A dc μH ± 20%	@ 0A dc μH ± 25%		Both Winding	One Winding		Parallel	Series
				Amps	Amps	mΩ Max	mΩ Max	
HA78D-L128100MLFTR	10.0	40.0	2.75	2.56	3.62	10.66	29.0	116.0
HA78D-L128220MLFTR	22.0	88.0	5.85	1.99	2.81	7.26	48.0	192.0
HA78D-L128330MLFTR	33.0	132.0	10.1	1.59	2.25	6.52	75.0	300.0
HA78D-L128470MLFTR	47.0	188.0	14.5	1.45	2.05	4.60	90.0	360.0

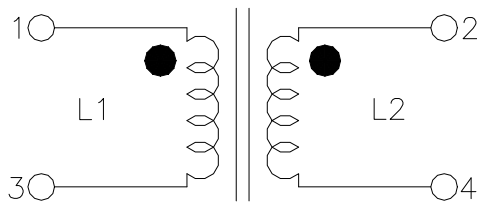
Notes: (1) Leakage inductance is for L1 and is measured with L2 shorted.

(2) The Heating Current is the DC current which causes the component temperature to increase by approximately 40°C from 25°C ambient. This current is determined by soldering the component on a typical application PCB, and then applying the current to the component for 30 minutes. Heating current in both winding is under series configuration.

(3) Isat is the saturation current at which inductance rolls off approximately 30% from its initial unbiased inductance value. It is sum of current flowing on both winding (parallel configuration).

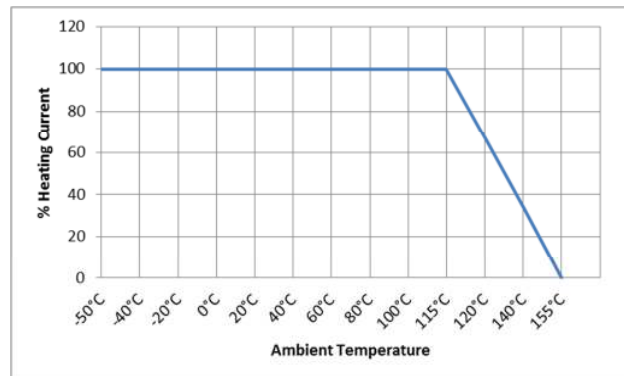
(4) PC Board layout, proximity of other components, trace size and airflow will affect temperature rise and must be considered when selecting an inductor.

Electrical Schematic



Coupled inductor,
transformer and
SEPIC modes

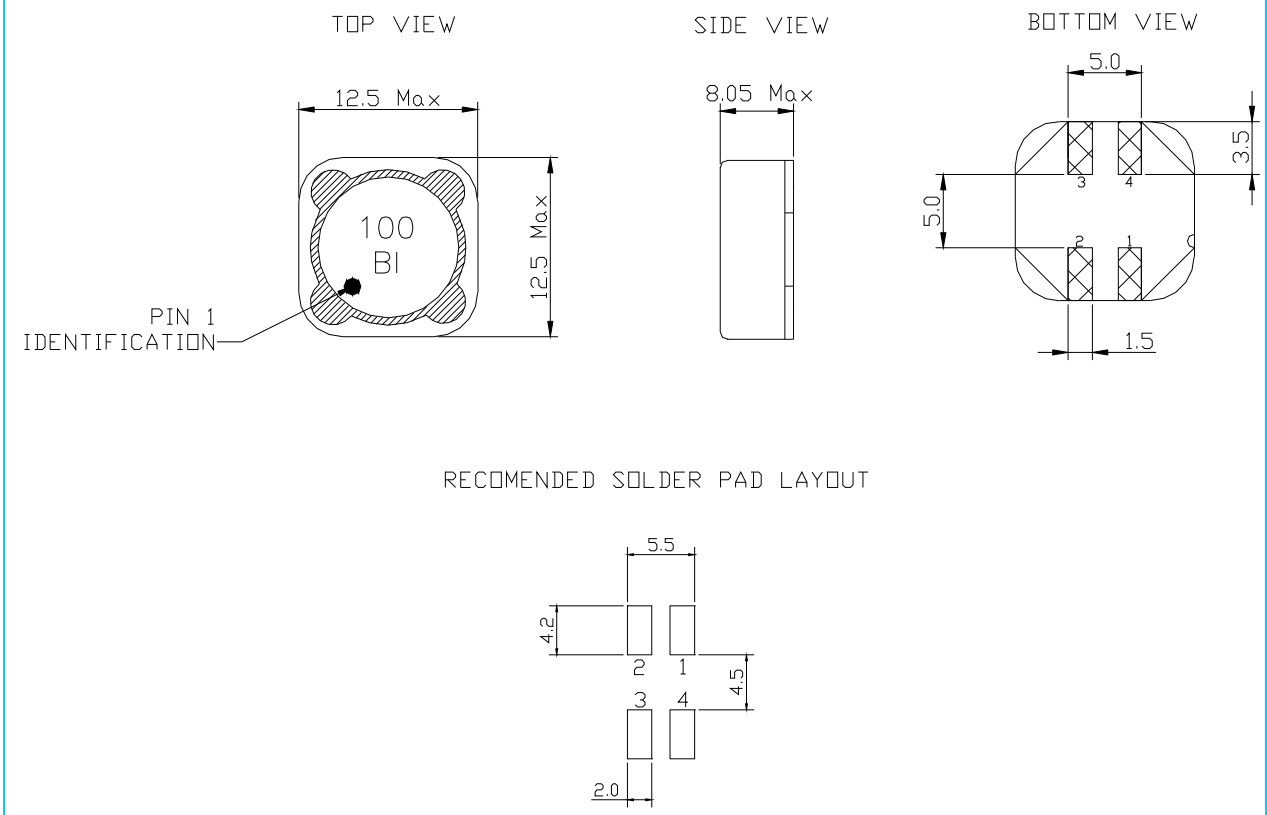
Derating Curve



General Note

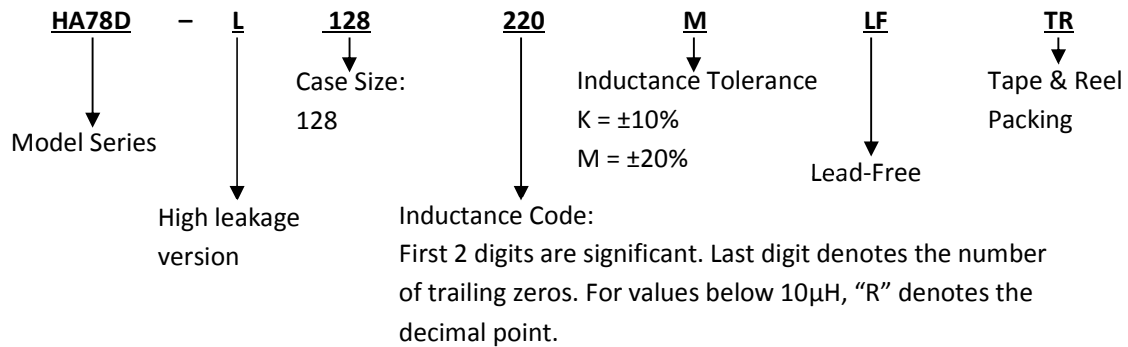
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Mechanical Outline Dimensions (mm)



Packing / Ordering Information

Standard :	Embossed Tape and Reel		
	Reel :	Diameter :	= 13" (330.2mm)
		Capacity :	Case Size 128 = 500 Units



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.