



# L201316Q Series



## 1. Features of L201316Q Series :

- Alloy powder based DIP Inductor with lower core loss.
- No Thermal aging concern.
- Inductance Range: 1.00uH to 105.0 uH, custom values are welcomed.
- High current output chokes, up to 98.0 Amp with approx. 30% roll off.
- For high power density & high power converters.
- Foot Print 33.0 x 32.0mm max. , 31.6mm max. Height.
- Operating Temperature Range: -55°C to + 150°C.
- AEC-Q200 compliant.
- RoHs & HF compliant.
- MTBF = 2,083,333,333 hours, FIT = 0.48 ( per billions hour ) per Telcordia SR-332.



## 2. Electrical Characteristics of L201316Q Series:

ITG Part Number	OCL (uH) ±20%	DCR (mΩ) ± 10% @25°C	Isat1 <sup>2</sup> (A) @25°C	Isat2 <sup>2</sup> (A) @25°C	Irms <sup>3</sup> (A) @25°C
L201316Q-1R0MHF	1.00	0.21	60.00	98.00	123.00
L201316Q-2R0MHF	2.00	0.31	50.00	76.00	106.00
L201316Q-3R3MHF	3.30	0.39	40.50	61.00	95.00
L201316Q-110MHF	11.60	0.86	52.50	75.00	72.00
L201316Q-240MHF	24.00	1.70	36.50	52.00	50.00
L201316Q-330MHF	33.00	2.40	31.50	45.00	42.00
L201316Q-470MHF	47.00	3.40	26.00	37.50	35.00
L201316Q-520MHF	52.00	3.50	23.50	35.50	34.00
L201316Q-101MHF	105.00	7.10	17.40	25.00	24.00

### Notes:

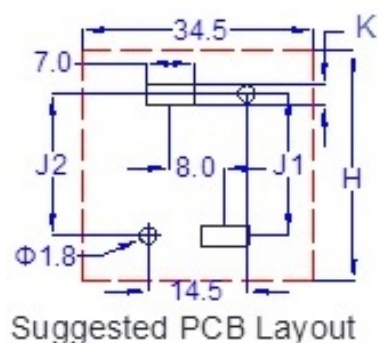
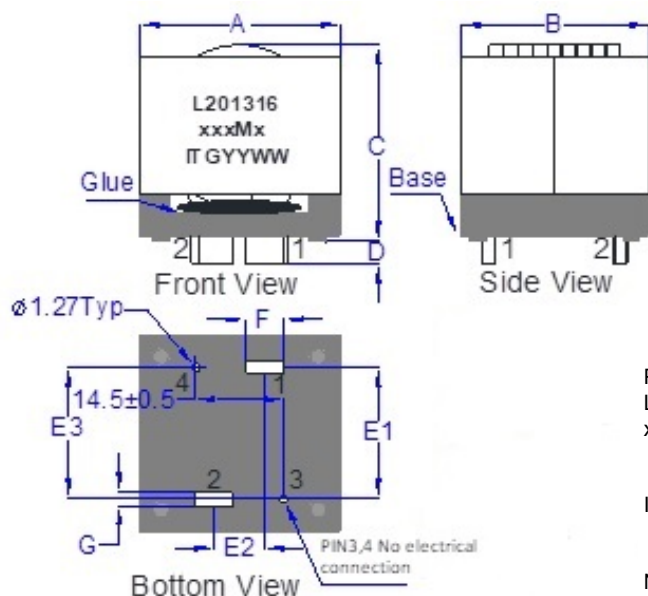
1. Open Circuit Inductance (OCL) and L@Irms and L@Isat are measured at 10KHz, 0.1V@ 25°C.
2. Isat1: DC current that causes inductance to drop by approximately 20% from OCL (Ta=25°C).  
Isat2: DC current that causes inductance to drop by approximately 30% from OCL (Ta=25°C).
3. Irms: DC current for an approximate temperature rise of 40°C without core loss. Derating is necessary for AC currents. PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 150°C under worst case operating conditions as verified in the end application.

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275  
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*\*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.*

### 3. Mechanical Dimension of L201316Q Series (Unit: mm):

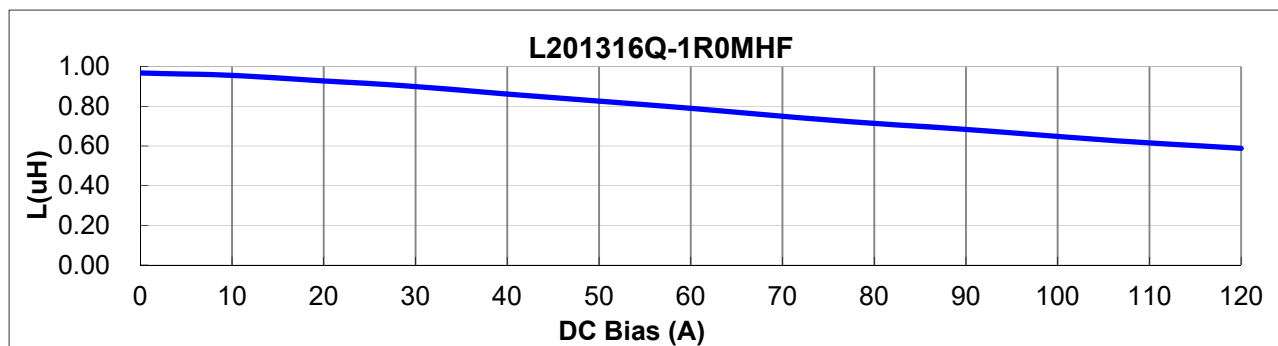
ITG Part Number	A ±1.00	B Max.	C Max.	D ±0.50	E1 / E3 ±0.50	E2 ±0.50	F ±0.20	G ±0.20	H Ref.	J1 / J2 ±0.50	K Ref.
L201316Q-1R0MHF	32.00	15.50	31.60	3.50	4.00	8.00	6.00	2.00	17.00	4.00	3.00
L201316Q-2R0MHF	32.00	17.00	31.60	3.50	6.50	8.00	6.00	2.00	18.50	6.50	3.00
L201316Q-3R0MHF	32.00	19.00	31.60	3.50	8.50	8.00	6.00	2.00	20.50	8.50	3.00
L201316Q-110MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	2.00	33.50	21.00	3.00
L201316Q-240MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	1.40	33.50	21.00	2.40
L201316Q-330MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	1.20	33.50	21.00	2.20
L201316Q-470MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	1.00	33.50	21.00	2.00
L201316Q-520MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	1.00	33.50	21.00	2.00
L201316Q-101MHF	32.00	32.00	31.60	3.50	21.00	8.00	6.00	0.70	33.50	21.00	1.70



Part Marking:  
 L201316: Series Name.  
 xxxMx: xxx is inductance value in uH(R: decimal point),  
 M is tolerance  
 x is special code.  
 ITGYYWW: ITG is Company Name  
 YYWW is Date Code.

Note: PIN3 & PIN4 provided for mounting stability only.

### 4. Inductance vs. Current vs. Temperature Rise Characteristics of L201316Q Series :



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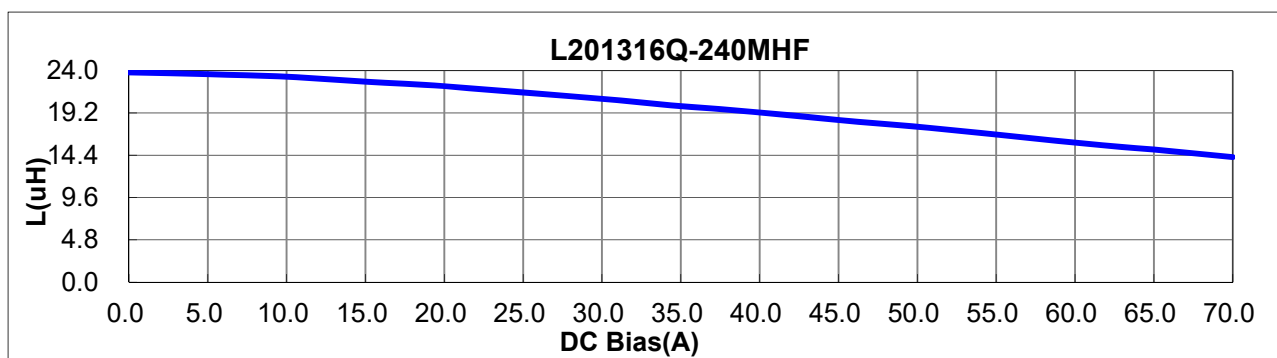
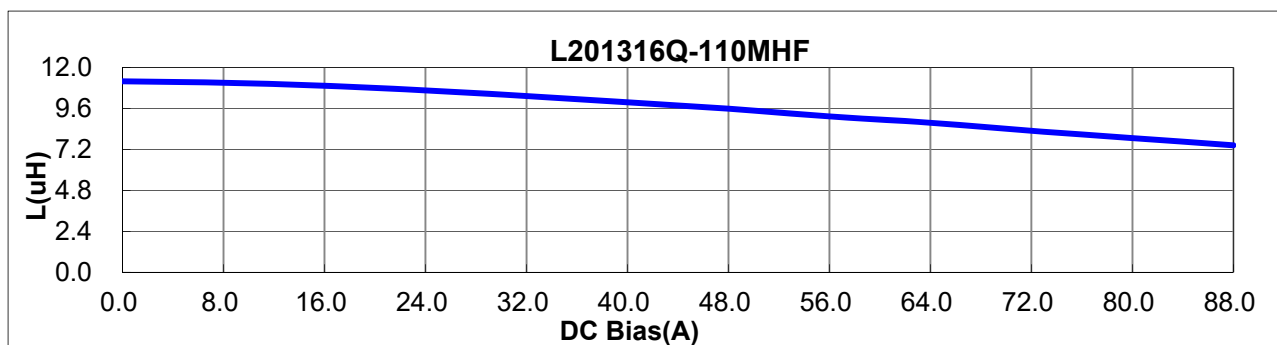
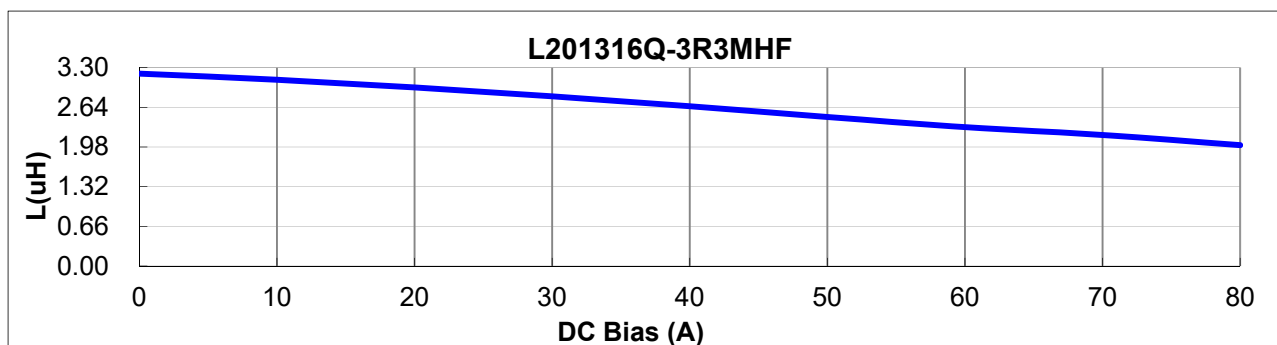
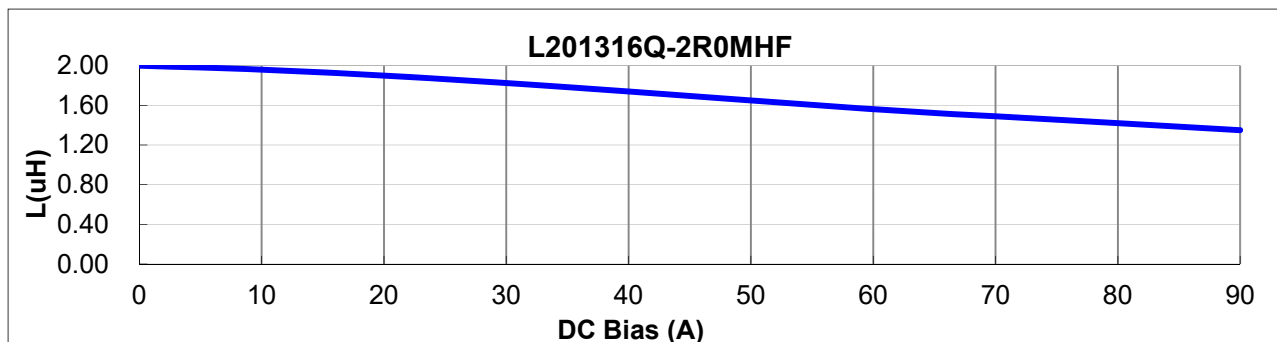
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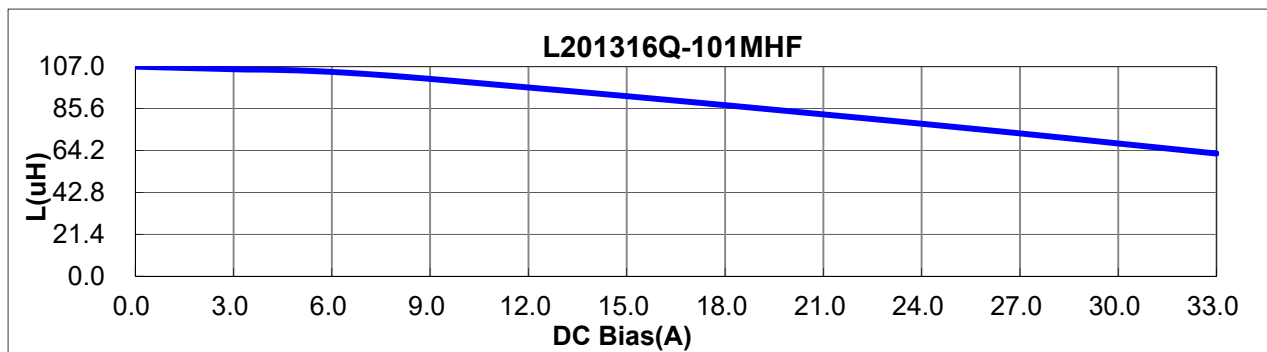
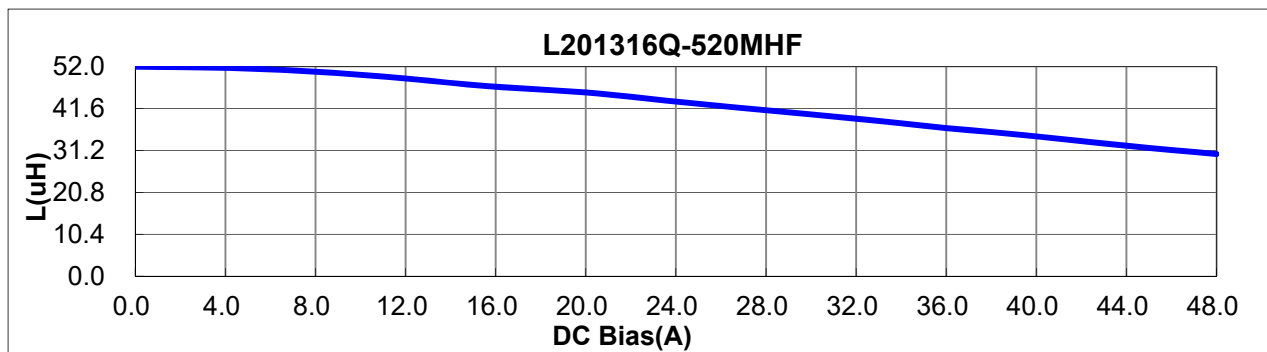
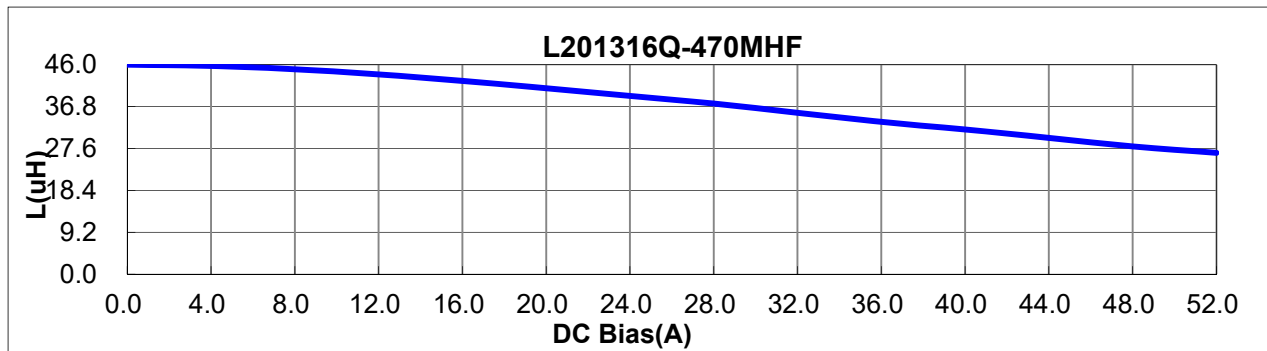
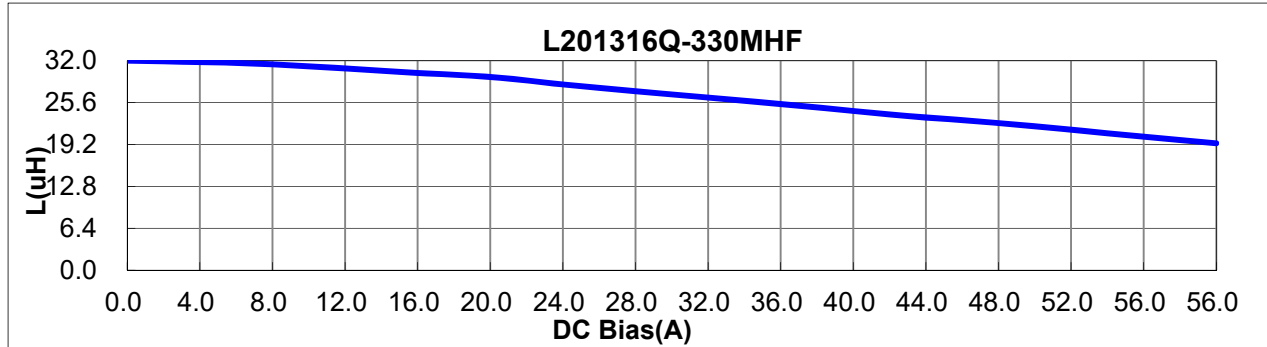
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