



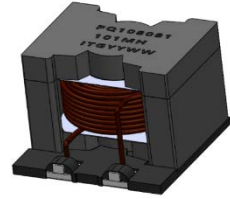
# PQ108081H Series



Halogen Free

## 1. Features of PQ108081H series:

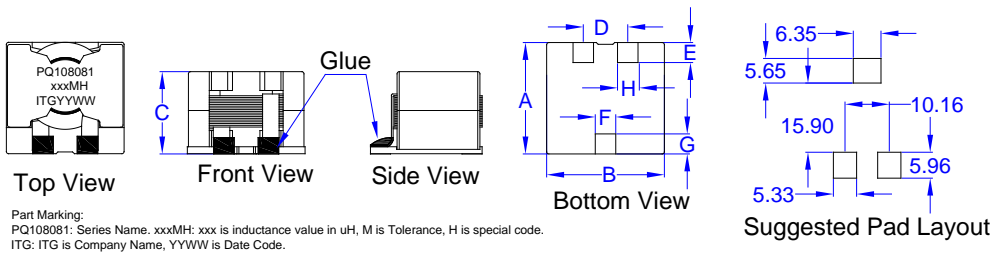
- Ferrite based SMD Inductor with lower core loss.
- Inductance range: 100uH up to 1000uH, custom values are welcomed.
- High energy storage capability, 100uH, 10.3 Amp with approx. 30% roll off.
- Surge Voltage: 400VDC.
- Operating Temperature Range -55° C to +130° C
- RoHs & HF compliant.
- MTBF = 2,083,333,333 hours, FIT = 0.48 ( per billions hour ) per Telcordia SR-332.



## 2. Electrical Characteristics of PQ108081H Series:

ITG Part Number	OCL <sup>1</sup> (uH) ± 20%	DCR (mΩ) ± 15% @25°C	Isat1 <sup>2</sup> (A) @25°C	Isat2 <sup>3</sup> (A) @25°C	Isat3 <sup>4</sup> (A) @25°C	Isat4 <sup>5</sup> (A) @100°C	Irms <sup>6</sup> (A) @25°C
PQ108081H-101MHF	100.00	28.50	9.50	10.10	10.30	8.00	10.50
PQ108081H-151MHF	150.00	40.50	7.80	8.30	8.60	6.60	8.80
PQ108081H-221MHF	220.00	54.50	6.10	6.35	6.60	5.00	7.60
PQ108081H-331MHF	330.00	69.40	4.85	5.10	5.35	4.05	6.70
PQ108081H-471MHF	470.00	94.70	4.10	4.30	4.50	3.40	5.70
PQ108081H-561MHF	560.00	116.90	3.75	3.90	4.10	3.15	5.20
PQ108081H-681MHF	680.00	150.30	3.40	3.55	3.75	2.85	4.60
PQ108081H-821MHF	820.00	184.50	3.10	3.25	3.40	2.60	4.10
PQ108081H-102MHF	1000.00	206.00	2.80	2.95	3.10	2.35	3.90

## 3. Mechanical Dimension of PQ108081H Series (Unit:mm):



Type	PQ108081H
A	27.94 (Max.)
B	27.94 (Max.)
C	20.0 (Max.)
D	10.16 ± 0.30
E	4.60 ± 0.20
F	4.70 ± 0.20
G	4.60 ± 0.20
H	4.70 ± 0.20

### Notes:

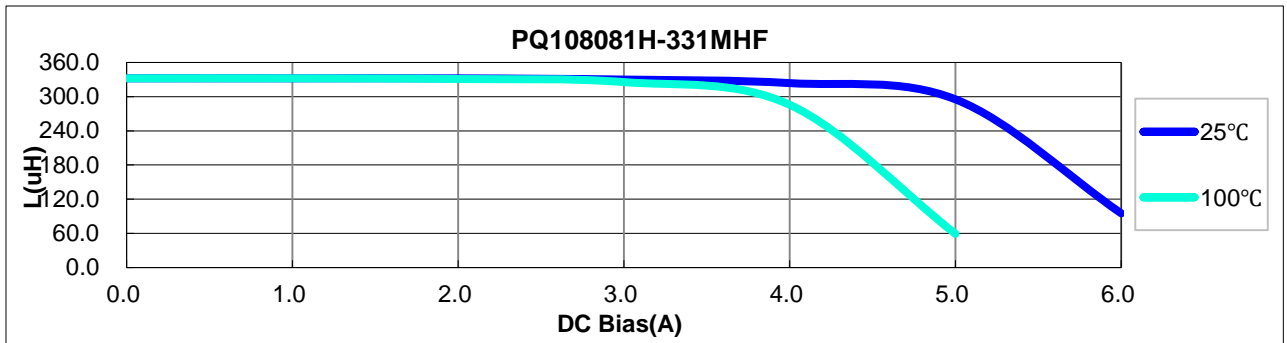
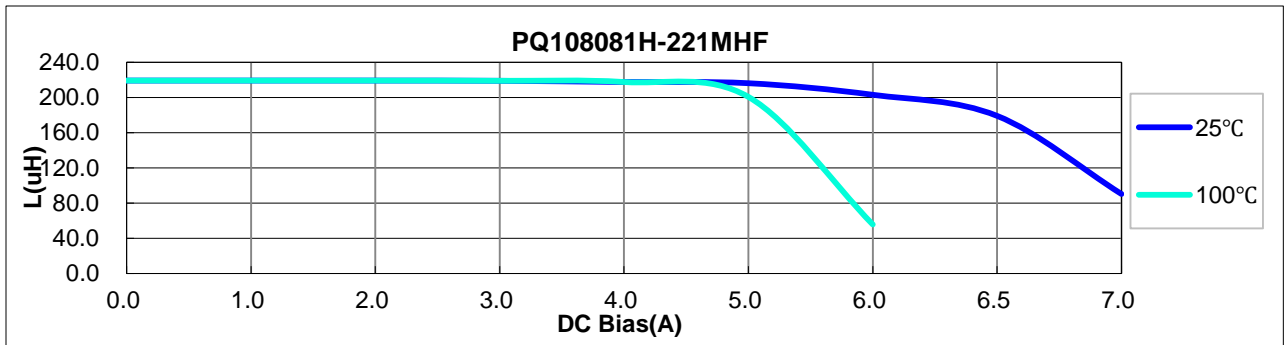
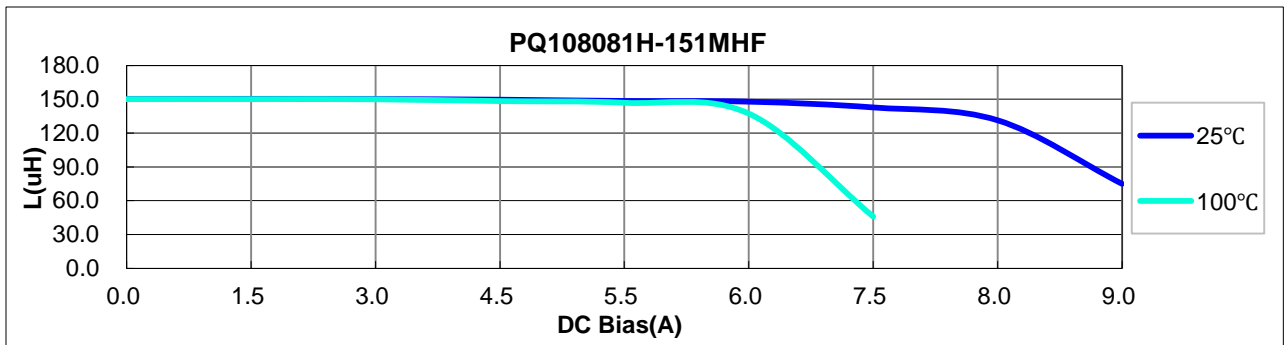
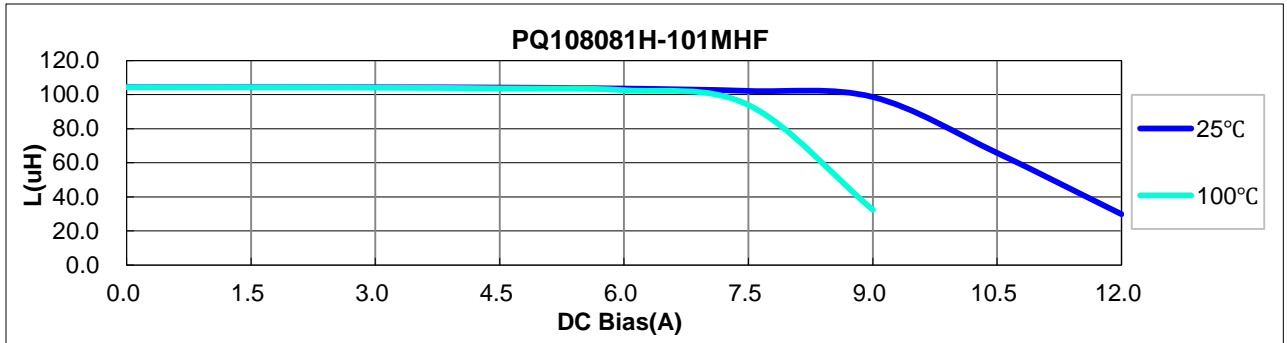
1. Open Circuit Inductance (OCL) and L@Irms and L@Isat are measured at 300KHz, 0.1V @ 25°C.
2. Isat1: DC current that causes inductance to drop by approximately 10% from OCL (Ta=25°C).
3. Isat2: DC current that causes inductance to drop by approximately 20% from OCL (Ta=25°C).
4. Isat3: DC current that causes inductance to drop by approximately 30% from OCL (Ta=25°C).
5. Isat4: DC current that causes inductance to drop by approximately 30% from OCL (Ta=100°C).
6. 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.

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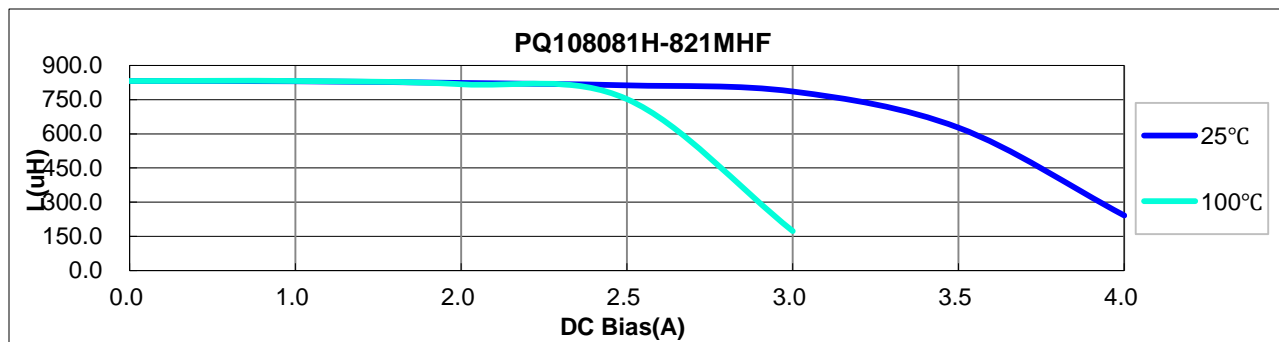
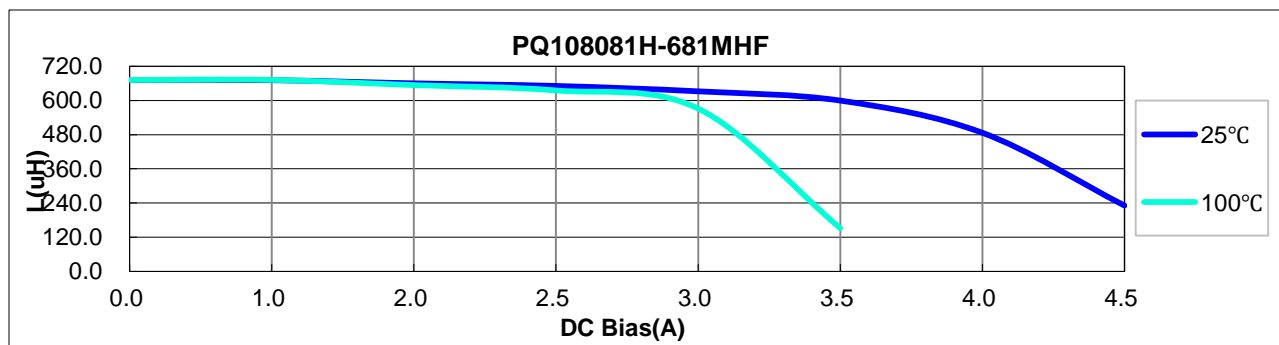
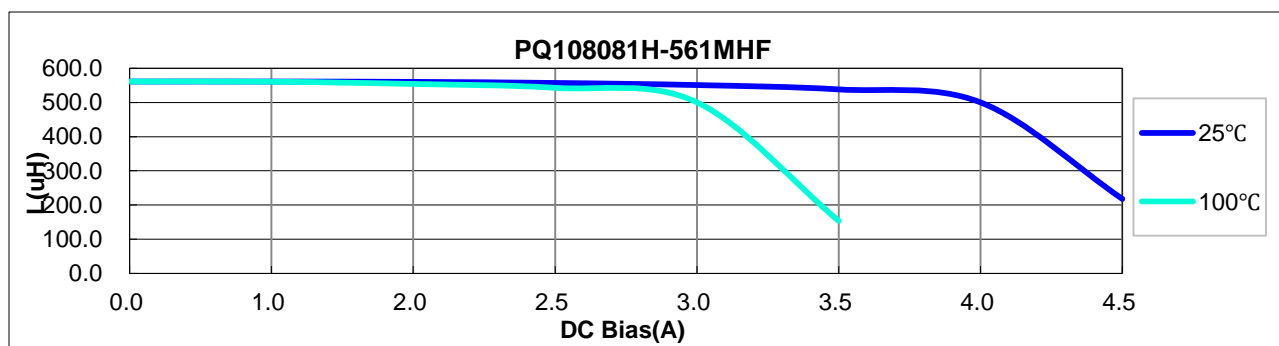
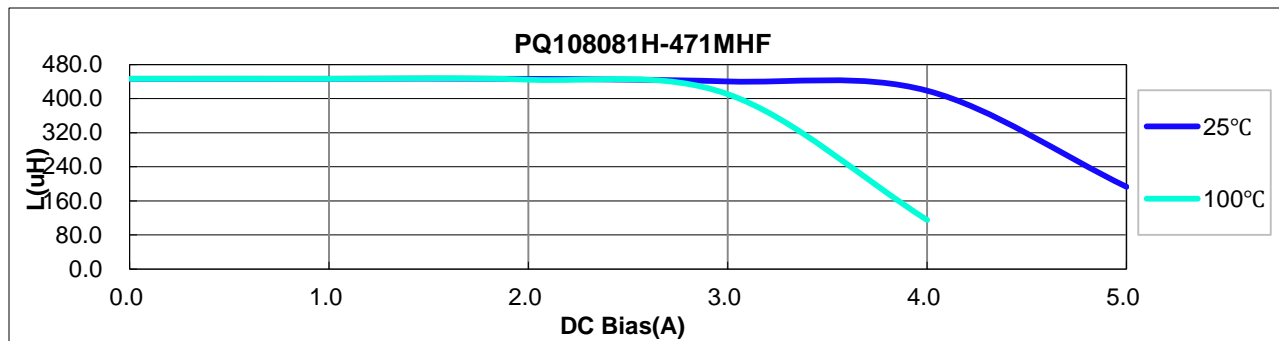
\*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



#### 4. Inductance vs. Current vs. Temperature Rise Characteristics of PQ108081H Series :



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