

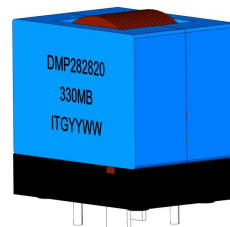


DMP282820B Series



1. Features of DMP282820B Series :

- Alloy powder based DIP Inductor with lower core loss.
- No thermal aging concerns.
- Inductance Range: 33.0 uH to 330.0 uH, custom values are welcomed.
- High current output chokes, up to 46.0 Amp with approx. 50% roll off.
- Designed and developed for Power Factor Correction applications.
- Foot Print 27.5 x 20.0mm max., 28.0mm max. Height.
- Surge Voltage: 400VDC.
- Operating Temperature Range: -55°C to + 150°C.
- RoHs & HF compliant.
- MTBF = 2,083,333,333 hours, FIT = 0.48 (per billions hour) per Telcordia SR-332.



2. Electrical Characteristics of DMP282820B Series:

ITG Part Number	OCL ¹ (uH) ± 20%	DCR (mΩ) ± 10% @25°C	Isat1 ² (A) @25°C	L@Isat1 ² (uH) Min.	Isat2 ² (A) @25°C	L@Isat2 ² (uH) Min.	Isat3 ² (A) @25°C	L@Isat3 ² (uH) Min.	Irms ³ (A) @25°C
DMP282820B-330MHF	33.0	4.5	23.7	23.8	31.2	20.4	46.0	14.1	26.0
DMP282820B-500MHF	50.0	6.8	19.5	35.1	25.7	30.1	37.9	20.8	21.0
DMP282820B-900MHF	90.0	12.5	14.4	64.4	19.0	55.2	28.0	38.2	15.5
DMP282820B-121MHF	125.0	16.7	12.3	88.7	16.1	76.1	23.8	52.7	13.5
DMP282820B-161MHF	165.0	22.3	10.7	117.0	14.0	100.3	20.8	69.4	11.7
DMP282820B-221MHF	220.0	31.0	9.2	157.8	12.1	135.3	17.9	93.7	10.0
DMP282820B-331MHF	330.0	51.6	7.5	235.7	9.9	202.1	14.6	140.0	7.7

Notes:

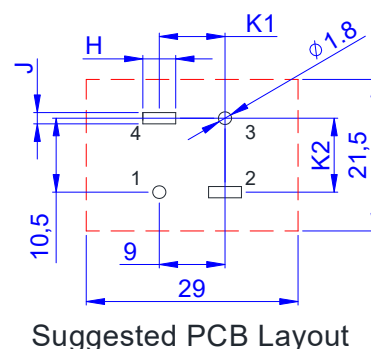
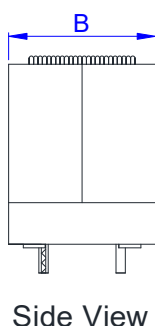
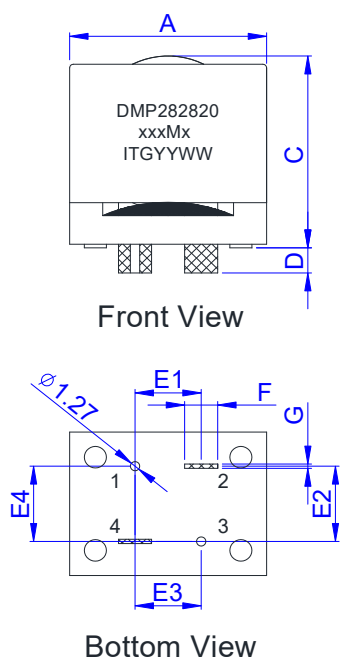
1. Open Circuit Inductance (OCL) and L@Isat are measured at 100KHz, 0.25V@ 25°C.
2. Isat1: DC current that causes inductance to drop 20%(Typ.) from OCL (Ta=25°C).
Isat2: DC current that causes inductance to drop 30%(Typ.) from OCL ;(Ta=25°C).
Isat3: DC current that causes inductance to drop 50%(Typ.) 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
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision A.0: Oct 25, 2023

*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 DMP282820B Series (Unit: mm):

ITG Part Number	A Max.	B Max.	C Max.	D ±0.50	E1/E3 ±0.50	E2 ±0.50	E4 ±0.50	F ±0.40	G Typ.	H Typ.	J Typ.	K1 Typ.	K2 Typ.
DMP282820B-330MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.70	5.50	1.30	9.00	10.50
DMP282820B-500MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.55	5.50	1.15	9.00	10.50
DMP282820B-900MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.40	5.50	1.00	9.00	10.50
DMP282820B-121MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.35	5.50	0.95	9.00	10.50
DMP282820B-161MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.30	5.50	0.90	9.00	10.50
DMP282820B-221MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.50	0.25	5.50	0.85	9.00	10.50
DMP282820B-331MHF	27.50	20.00	28.00	3.50	9.00	10.50	10.50	4.00	0.20	5.00	0.80	9.00	10.50



Part Marking:

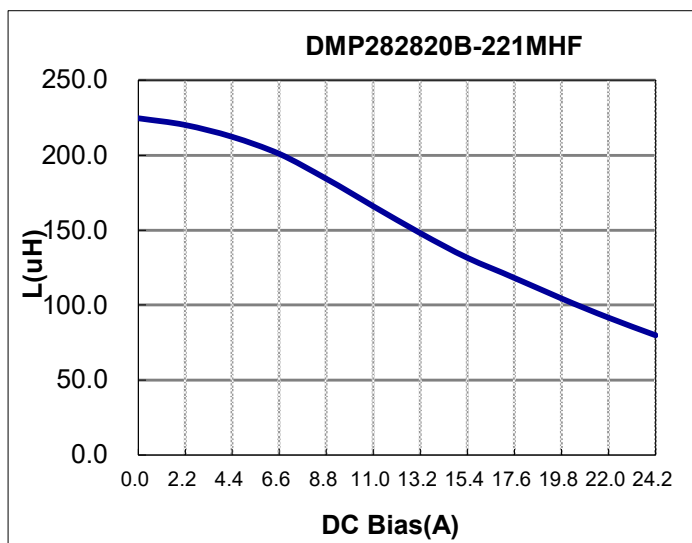
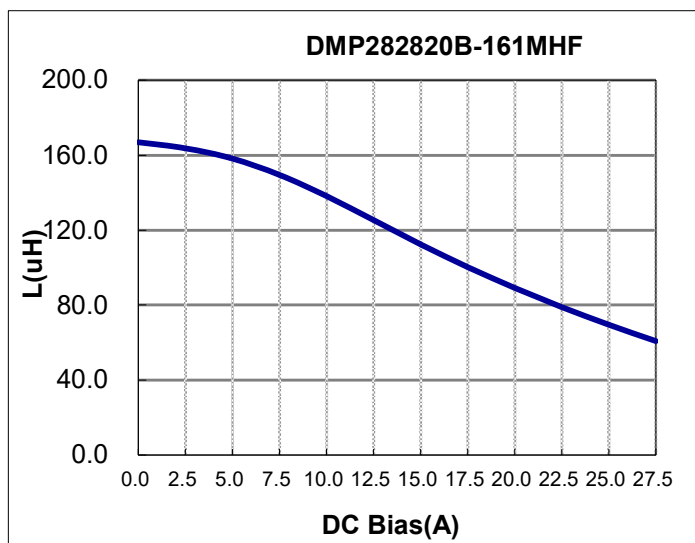
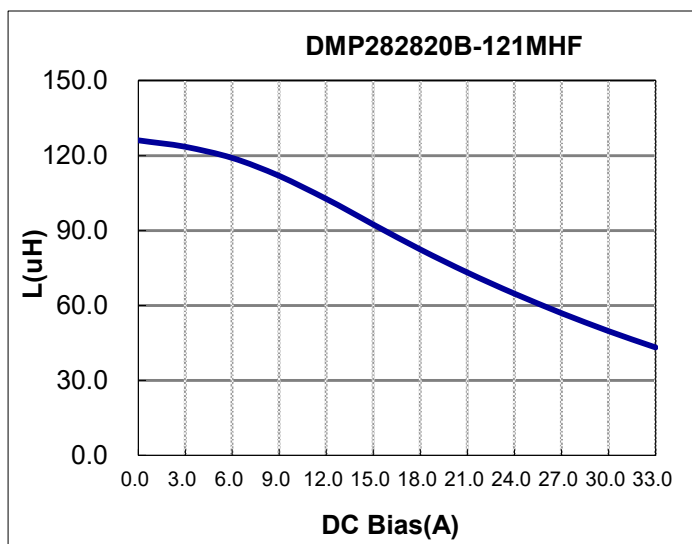
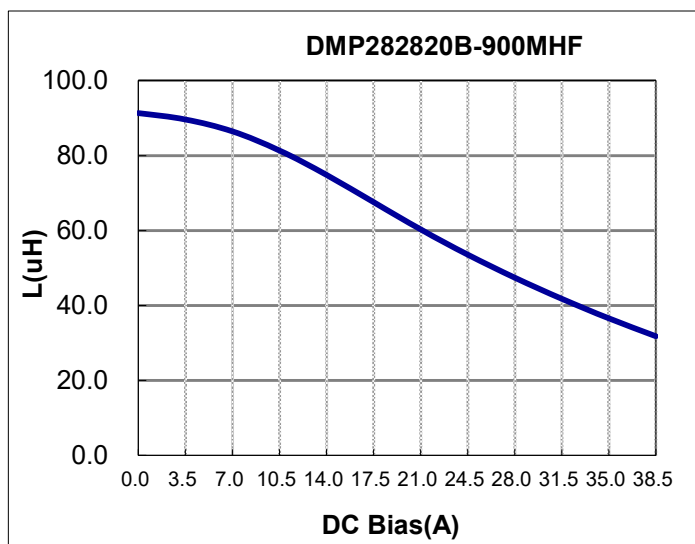
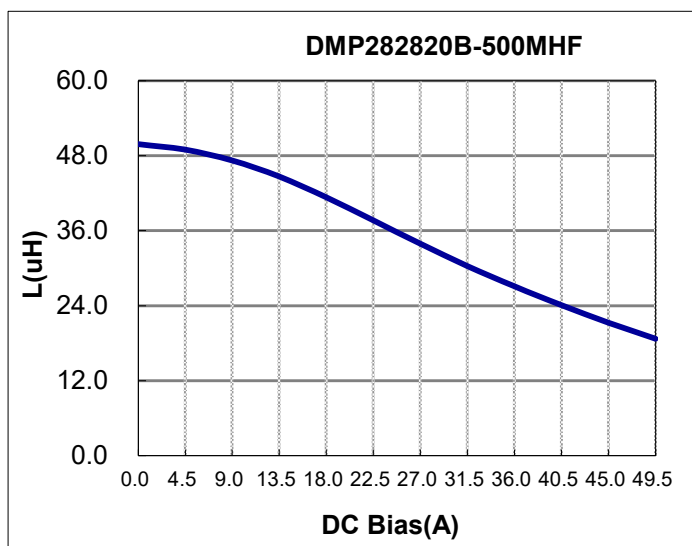
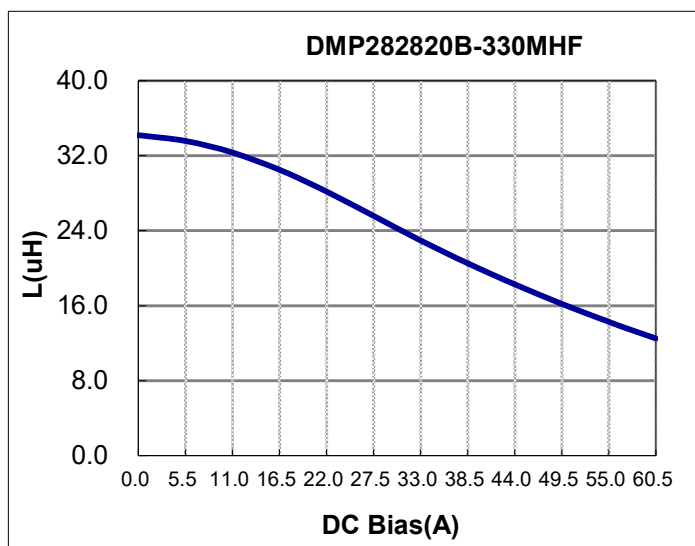
DMP282820: Series Name.

xxxMx: xxx is inductance value in uH(R: decimal point),
M is tolerance, x is special code.

ITGYYWW: ITG is Company Name and YYWW is Date Code.

Note: PIN1 & PIN3 provided for mounting stability only.

4. Inductance vs. Current Characteristics of DMP282820B Series :

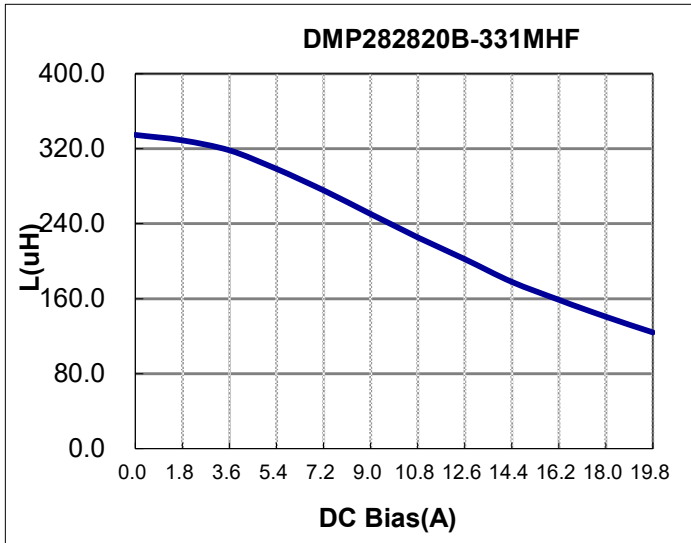




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4. Inductance vs. Current Characteristics of DMP282820B Series :



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