PFC282822B Series

1. Features of PFC282822B Series :

- Alloy powder based DIP Inductor with lower core loss.
- No thermal aging concerns.
- Inductance Range: 175.0 uH to 380.0 uH, custom values are welcomed.
- High current output chokes, up to 20.4 Amp with approx. 50% roll off.
- Designed and developed for Power Factor Correction applications.
- Foot Print 27.5 x 21.5mm 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 PFC282822B Series:

ITG Part Number	OCL [1] (uH) ± 20%	DCR (mΩ) ± 10% @25℃	Isat1 [2] (A) @25℃	L@Isat1 [2] (uH) Min.	Isat2 [2] (A) @25℃	L@Isat2 [2] (uH) Min.	Isat3 [2] (A) @25℃	L@Isat3 [2] (uH) Min.	Irms [3] (A) @25℃
PFC282822B-171MHF	175.0	23.8	10.5	126.4	13.8	108.4	20.4	75.1	11.0
PFC282822B-381MHF	380.0	56.3	7.2	267.6	9.5	229.4	14.0	158.9	7.0

Notes:

1. Open Circuit Inductance (OCL) and L@Isat are measured at 100KHz, 0.25V@ 25ºC.
2. Isat1: DC current that causes inductance to drop 20%(Typ.) from OCL (Ta=25℃).
   Isat2: DC current that causes inductance to drop 30%(Typ.) from OCL ;(Ta=25℃).
   Isat3: DC current that causes inductance to drop 50%(Typ.) from OCL ;(Ta=25℃).
3. Irms: DC current for an approximate temperature rise of 40℃ 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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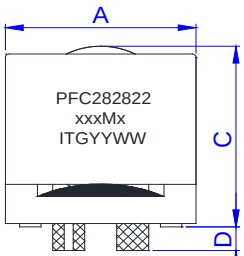
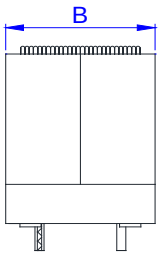
3. Mechanical Dimension of PFC282822B Series (Unit: mm):

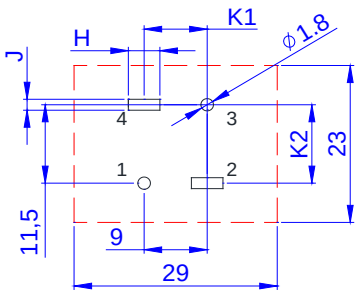
ITG Part Number	A Max.	B Max.	C Max.	D ±0.50	E1/E3 ±0.50	E2 ±0.50	E4 ±0.50	F ±0.40	G Typ.	H Typ.	J Typ.	K1 Typ.	K2 Typ.
PFC282822B-171MHF	27.50	21.50	28.00	3.50	9.00	11.50	11.50	4.50	0.30	5.50	0.90	9.00	11.50
PFC282822B-381MHF	27.50	21.50	28.00	3.50	9.00	11.50	11.50	4.00	0.20	5.00	0.80	9.00	11.50



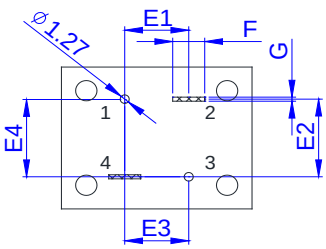
Front View



Side View



Suggested PCB Layout



Bottom View

Note:PIN1 & PIN3 provided for mounting stability only.

Part Marking:
PFC282822: 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.

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4. Inductance vs. Current Characteristics of PFC282822B Series :