SMD Power Inductor   SEPI805080LN-Series-D
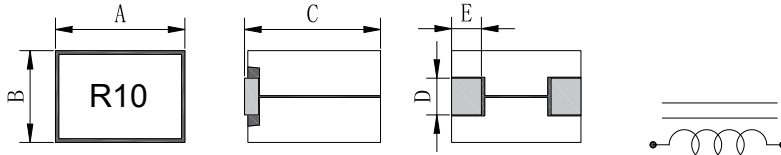
1. Features

1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.
5. Operating temperature:-40~+125℃(Including self - temperature rise)
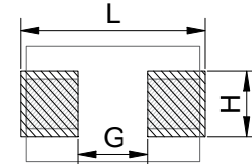
2. Applications

Commercial applications.

3. Dimensions

Recommend PC Board Pattern

Series	A(mm) Max	B(mm) Max	C(mm) Max	D(mm) Max	E(mm) Max
SEPI805080LN	8.0	5.0	8.0	2.1	2.0

L(mm)	G(mm)	H(mm)
8.5	4.1	2.5

Note: 1.PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

4. Part Numbering

SEPI	805080	LN	-	R10	L	R2007	D
A	B	C		D	E	F	G

A: Series
B: Dimension   BxC
C: Type   Standard
D: Inductance   R10=0.1uH
E: Inductance Tolerance   L=±15%
F: Code   DC Resistance,Marking direction cannot decide polarity.
G: D/C   Marking: Black.R10

5. Specification

Part Number	Inductance L0 A(uH) ±15%	Irms(A) Typ	Isat (A) Typ	DCR(mΩ)
SEPI805080LN-R10L-R2007-D	0.10	65	75	0.20±7%
SEPI805080LN-R12L-R2007-D	0.12	65	62	0.20±7%
SEPI805080LN-R18L-R2007-D	0.18	65	35	0.20±7%

Note:

1. Test frequency : Ls : 100KHz /0.1V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : Agilent 4284A,E4991A,4339B,KEYSIGHT E4980A/AL,chroma3302,3250,16502.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately △T of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 165℃under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.