

1. Features

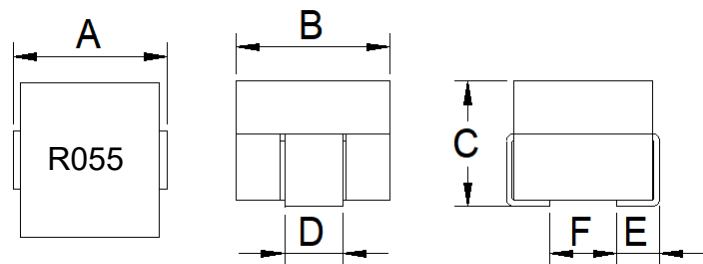
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free & Halogen-Free and RoHS compliant.



2. Applications

Commercial applications.

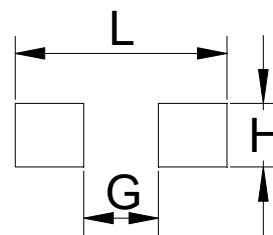
3. Dimensions



A	B	C	D	E	F
5.2±0.3	5.4±0.3	4.3±0.3	2.0±0.2	1.5±0.3	1.8MIN

Unit:mm

Recommend PC Board Pattern



L	G	H
5.8	1.8	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 0.12mm and above.

4. Part Numbering

SLPI	050546	W03	-	R055	M	-	R2010	-	BC
A	B	C		D	E		F		G

A: Series
 B: Dimension
 C: Type
 D: Inductance
 E: Inductance Tolerance
 F: DCR
 G: Code

BxC
 Materials
 R055=0.055uH
 M=±20%
 Black Carrier and Black Marking

5. Specification

Part Number	Inductance L0A DC (uh)	Inductance uH @Isat	I rms(A)	I sat (A) Max		DCR (mΩ)
		Min	Max	25℃	100℃	
SLPI050546W03-R055M-R2010-BC	0.055±20%	0.035	30	50	46	0.20±10%

Note:

1. Test frequency : Ls : 100KHz /0.1V.
2. All test data referenced to 20℃ 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 ΔT of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 20%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ 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.
8. Rated DC current: The lower value of Irms and Isat.