

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

HSDM SERIES

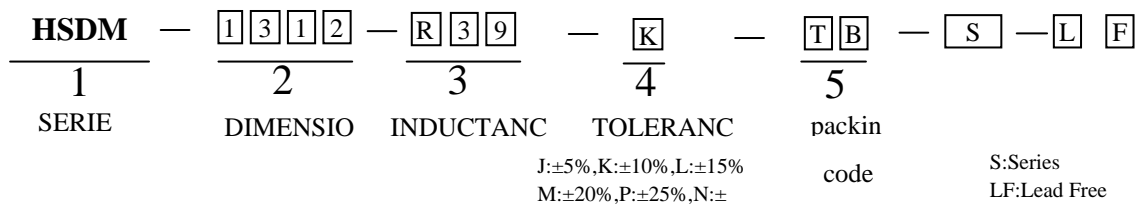
1. FEATURES:

- (1) Ultra low cost, very low DC resistance, Low noise .
- (2) Shielded construction, high frequency range up to 500KHz.
- (3) High current rating up to DC 40A.

2. APPLICATIONS:

- (1) Power suppliers DC-DC converters .
- (2) Motherboards for laptop and desktop computers.
- (3) Server application.

3. PART NUMBER SYSTEM:



SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

HSDM SERIES

4 . PHYSICAL CHARACTERISTICS AND ELECTRICAL CHARACTERISTICS:

HSDM0808T SERIES		Rev.No.	A
		Page	1
<u>I .CONFIGURATION&DIMENSIONS:</u>			
	A: 8.7 ± 0.5 mm		
	B: 7.2 ± 0.5 mm		
	C: $8.5\max$ mm		
	D: 3.4 ± 0.5 mm		
	E: 6.0 ± 0.5 mm		
	F: 0.7 ± 0.2 mm		
Remark: Printing protruding of Raw materials.			
<u>II .MATERIALS:</u>			
NO.	DESCRIPTION		
a.	IRON POWDER		
b.	WIRE		

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

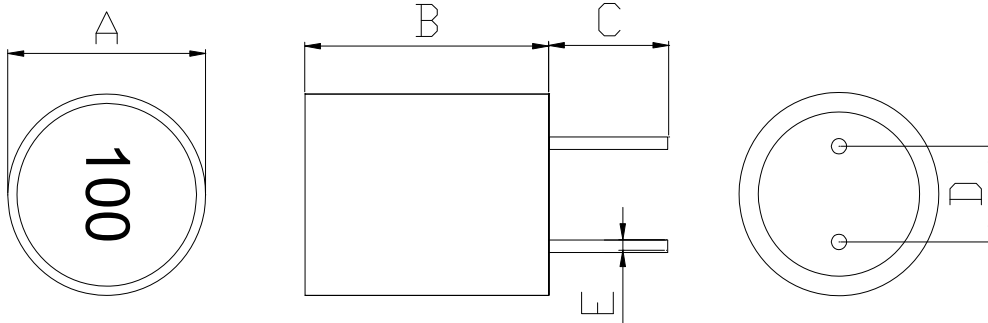
HSDM SERIES

HSDM0808T SERIES				Rev.No.	A
				Page	2
PART NO	Ls	DCR max	IDC max	TEST FREQ.	
	(uH)	(mΩ)	(A)	(Hz)	
<input type="checkbox"/> HSDM0808T-R56M-B-S	0.56	2.50	32	100K/0.1V	
<input type="checkbox"/> HSDM0808T-1R0M-B-S	1.00	5.60	21	100K/0.1V	
<input type="checkbox"/> HSDM0808T-1R5M-B-S	1.50	7.50	18	100K/0.1V	
<input type="checkbox"/> HSDM0808T-2R2M-B-S	2.20	10.00	16	100K/0.1V	
<input type="checkbox"/> HSDM0808T-2R8M-B-S	2.80	11.80	15	100K/0.1V	
<input type="checkbox"/> HSDM0808T-3R3M-B-S	3.30	13.60	14	100K/0.1V	
<input type="checkbox"/> HSDM0808T-4R7M-B-S	4.70	17.00	12	100K/0.1V	

HSDM1010H SERIES

Rev.No.	A
Page	1

I .CONFIGURATION&DIMENSIONS:



A:11.0max mm

B:11.0±0.5 mm

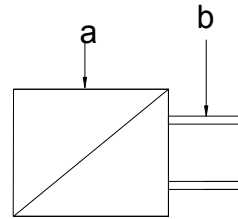
C:5.0±1.0 mm

D:5.0±0.5 mm

E:0.6±0.1 mm

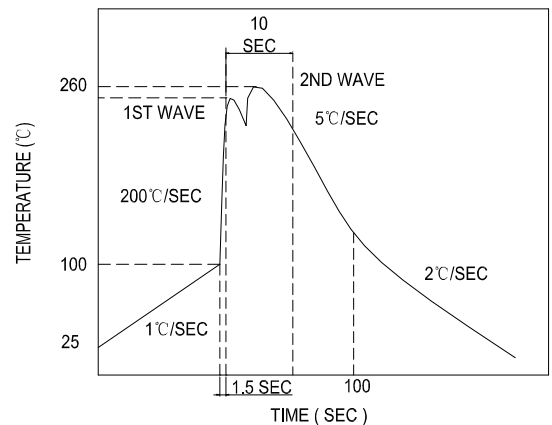
II .MATERIALS:

NO.	DESCRIPTION
a.	IRON POWDER
b.	WIRE



III.GENERAL SPECIFICATION:

1. Tested at 1KHz,0.1Vrms,0 Adc.
2. **DC current at which the inductance drops 10% typ.**
from its value without current.
3. Average current for 40°C temperature rise from 25°C.
4. **Electrical specifications at:25°C**
5. Storage temp range:-40°C----+85°C
6. **Operating temp range:-25°C----+125°C**



WAVE SOLDERING PROFILE

Notes:The part temperature (ambient + temp. rise)
should not exceed 125°C under worse case operation
conditions.

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

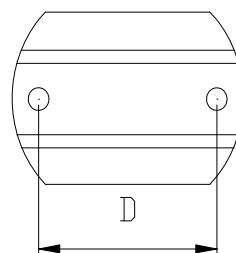
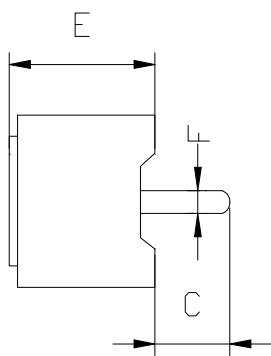
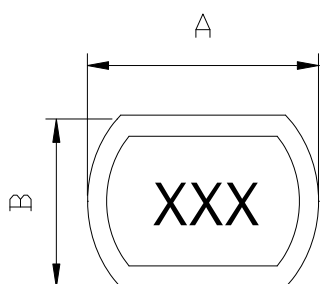
HSDM SERIES

HSDM1010H SERIES					Rev.No.	A
					Page	2
PART NO	Ls (uH)	DCR (max) (mΩ)	Isat(max) (A)	Idc (A)	TEST FREQ. (Hz)	
<input type="checkbox"/> HSDM1010H-100M-B-S	10.0	22.0	4.3	6.5	1.0K/0.1V	
<input type="checkbox"/> HSDM1010H-150M-B-S	15.0	27.0	3.5	6.0	1.0K/0.1V	
<input type="checkbox"/> HSDM1010H-220M-B-S	22.0	35.0	2.7	6.0	1.0K/0.1V	
<input type="checkbox"/> HSDM1010H-330M-B-S	33.0	52.0	2.3	4.0	1.0K/0.1V	

HSDM SERIES

HSDM1210 SERIES	Rev.No.	A
	Page	1

I .CONFIGURATION&DIMENSIONS:

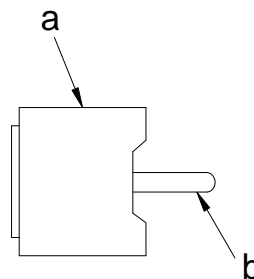


A:	12.3±0.5	mm
B:	10.2±0.5	mm
C:	3.4±0.5	mm
D:	8.0±0.5	mm
E:	10.0max	mm
F:	1.2±0.2	mm

XXX:表示印字

II .MATERIALS:

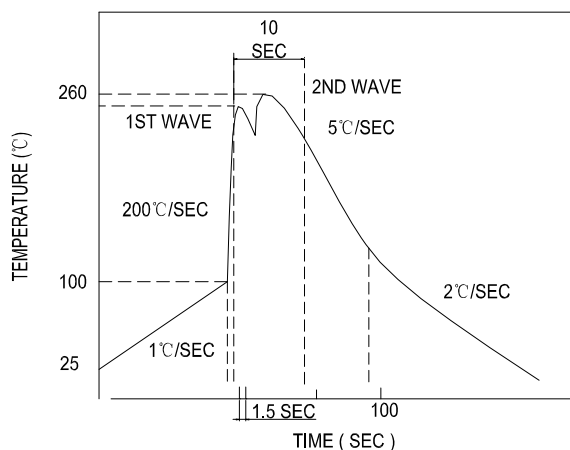
- | | |
|-----|--------------------|
| NO. | DESCRIPTION |
| a. | IRON POWDER |
| b. | WIRE |



III.GENERAL SPECIFICATION:

1. Tested at 100KHz,0.1Vrms,0 Adc.
2. **DC current at which the inductance drops 20% TYP**
from its value without current.
3. Average current for 40°C temperature rise from 25°C.
4. **Electrical specifications at:25°C**
5. Storage temp range:-40°C-----+125°C
6. **Operating temp range:-25°C-----+125°C**

Notes:The part temperature (ambient + temp. rise) should not exceed 125°C under worse case operation conditions.



WAVE SOLDERING PROFILE

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

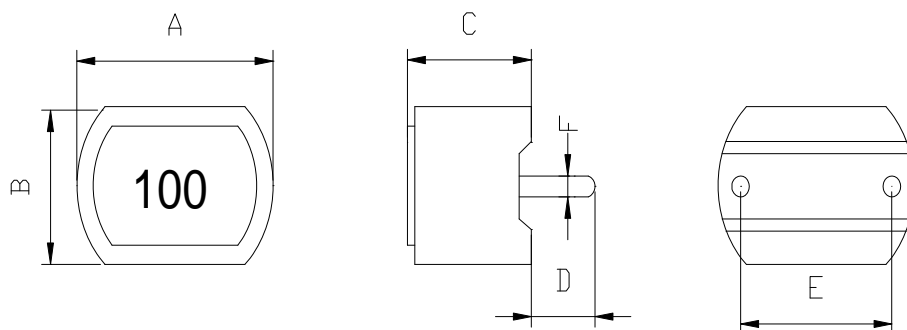
HSDM SERIES

HSDM1210 SERIES				Rev.No.	A
				Page	2
	Ls	DCR max	IDC max	TEST FREQ.	
PART NO	(uH)	(mΩ)	(A)	(Hz)	
<input type="checkbox"/> HSDM1210-R22M-B-S	0.22	0.60	56	100K/0.1V	
<input type="checkbox"/> HSDM1210-R33M-B-S	0.33	0.80	48	100K/0.1V	
<input type="checkbox"/> HSDM1210-R36M-B-S	0.36	0.80	45	100K/0.1V	
<input type="checkbox"/> HSDM1210-R39M-B-S	0.39	0.80	45	100K/0.1V	
<input type="checkbox"/> HSDM1210-R47M-B-S	0.47	1.00	40	100K/0.1V	
<input type="checkbox"/> HSDM1210-R56M-B-S	0.56	1.00	40	100K/0.1V	
<input type="checkbox"/> HSDM1210-R60M-B-S	0.60	1.00	40	100K/0.1V	
<input type="checkbox"/> HSDM1210-R68M-B-S	0.68	1.00	40	100K/0.1V	
<input type="checkbox"/> HSDM1210-R80M-B-S	0.80	1.25	36	100K/0.1V	
<input type="checkbox"/> HSDM1210-1R0M-B-S	1.00	2.00	32	100K/0.1V	
<input type="checkbox"/> HSDM1210-1R5M-B-S	1.50	3.50	30	100K/0.1V	
<input type="checkbox"/> HSDM1210-2R2M-B-S	2.20	5.00	24	100K/0.1V	
<input type="checkbox"/> HSDM1210-2R8M-B-S	2.80	6.40	20	100K/0.1V	
<input type="checkbox"/> HSDM1210-3R3M-B-S	3.30	7.70	16	100K/0.1V	
<input type="checkbox"/> HSDM1210-4R7M-B-S	4.70	10.00	15	100K/0.1V	

HSDM1210H SERIES

Rev.No.	A
Page	1

I .CONFIGURATION&DIMENSIONS:



A:12.3±0.5 mm

B:10.2±0.5 mm

C:15.0 max mm

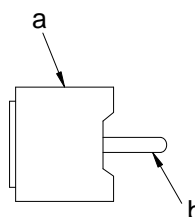
D:5.0±0.5 mm

E:8.0±0.5 mm

F:0.8±0.1 mm

II .MATERIALS:

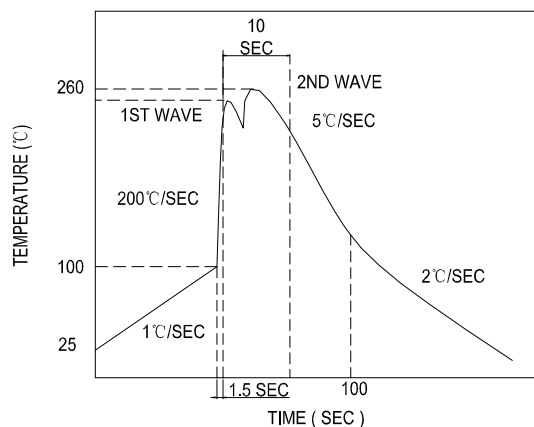
NO.	DESCRIPTION
a.	IRON POWDER
b.	WIRE



III.GENERAL SPECIFICATION:

1. Tested at 100KHz,0.1Vrms,0 Adc.
2. **DC current at which the inductance drops 10% TYP**
from its value without current.
3. Average current for 40°C temperature rise from 25°C.
4. **Electrical specifications at:25 °C**
5. Storage temp range:-40°C-----+125°C
6. **Operating temp range:-25°C-----+125°C**

Notes:The part temperature (ambient + temp. rise) should not exceed 125°C under worse case operation conditions.



WAVE SOLDERING PROFILE

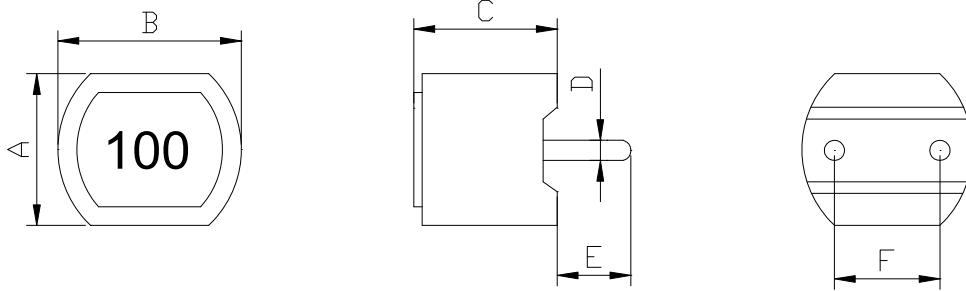
SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

HSDM SERIES

HSDM1210H SERIES				Rev.No.	A
				Page	2
PART NO	Ls (uH)	DCR max (mΩ)	IDC max (A)	TEST FREQ. (Hz)	
<input type="checkbox"/> HSDM1210H-100M-B-S	10.0	16.0	6	100K/0.1V	
<input type="checkbox"/> HSDM1210H-150M-B-S	15.0	22.0	5	100K/0.1V	
<input type="checkbox"/> HSDM1210H-220M-B-S	22.0	30.0	4	100K/0.1V	

HSDM1312H SERIES	Rev.No.	A
	Page	1

I . CONFIGURATION&DIMENSIONS:

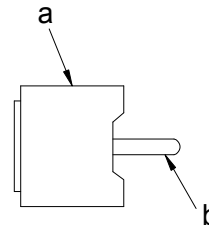


A:12.4±0.5	mm
B:13.4±0.5	mm
C:12.0±0.5	mm
D:1.0±0.1	mm
E:3.4±0.5	mm
F:7.5±0.5	mm

Remark: Printing protruding of Raw materials.

II . MATERIALS:

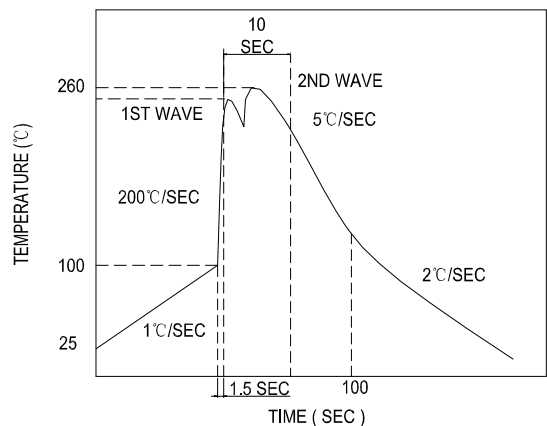
NO.	DESCRIPTION
a.	IRON POWDER
b.	WIRE



III.GENERAL SPECIFICATION:

1. Tested at 100KHz,1.0Vrms,0 Adc.
2. DC current at which the inductance drops20%typ.
from its value without current.
3. Average current for 40℃ temperature rise from 25℃.
4. Electrical specifications at:25℃
5. Storage temp range:-40℃----+125℃
6. Operating temp range:-25℃----+125℃

Notes:The part temperature (ambient + temp. rise) should not exceed 125℃ under worse case operation conditions.



WAVE SOLDERING PROFILE

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

HSDM SERIES

HSDM1312H SERIES					Rev.No.	A
					Page	2
PART NO	Ls (uH)	DCR max (mΩ)	Isat max (A)	Idc (A)	TEST FREQ. (Hz)	
<input type="checkbox"/> HSDM1312H-100M-B-S	10.0	10.5	13.0	10.0	100K/1V	
<input type="checkbox"/> HSDM1312H-150M-B-S	15.0	15.0	12.0	9.0	100K/1V	
<input type="checkbox"/> HSDM1312H-220M-B-S	22.0	20.0	11.0	8.0	100K/1V	
<input type="checkbox"/> HSDM1312H-330M-B-S	33.0	32.0	3.5	6.8	100K/1V	