

# SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

## HSSFG SERIES

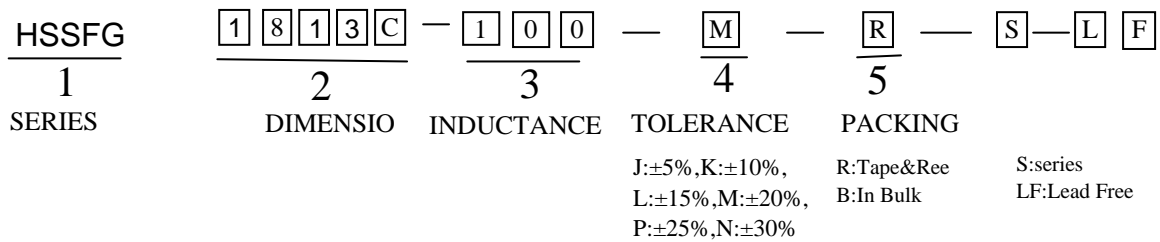
### 1. FEATURES:

- (1) The surface mount inductors are designed for the smallest possible size and high performance.
- (2) They are with high energy storage and very low resistance making them the ideal inductance for DC-DC conversion in the following applications.

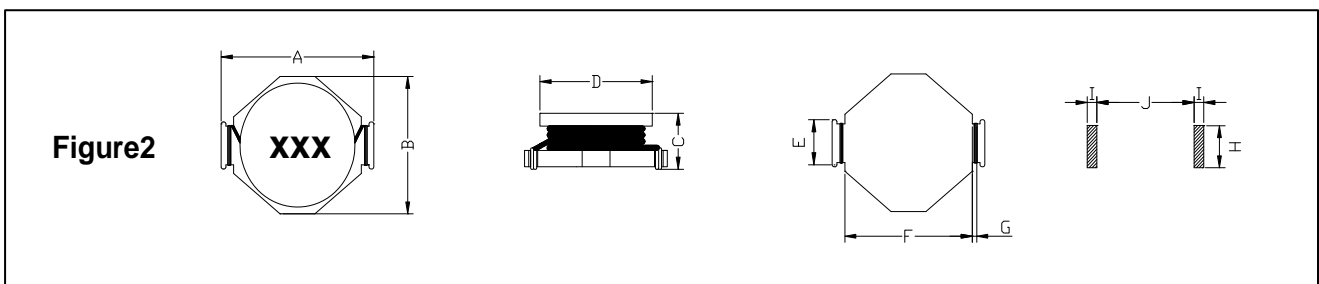
### 2. APPLICATIONS:

- (1) VGA display card, Notebook computers PDAs.
- (2) Step-up and step-down converters.
- (3) Flash memory programmers, etc.

### 3. PART NUMBER SYSTEM:



### 4. PHYSICAL CHARACTERISTICS:



UNIT:mm

Fype	A (max)	B (max)	C	D (max)	E (ref.)	F (ref.)	G (ref.)
HS-SFG1813HC	8.89	6.10	4.57±0.3	5.0	6.99	4.01	1.91
HS-SFG3316HC	13.21	9.91	8.38±0.3	6.35	10.16	4.06	1.52
HS-SFG5022HC	22.35	16.26	12.7±0.3	8.0	17.53	8.64	3.18

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### 5. ELECTRICAL CHARACTERISTICS:

#### HS-SFG1813HC SERIES

Part Number	Inductance <sup>1</sup> ( $\mu$ H)	DCR(max) ( $\Omega$ )	SRF (typ.) (MHz)	Isat <sup>2</sup> (A)	Irms <sup>3</sup> (A rms)
HS-SFG1813HC-R18M	0.18	0.003	800	14.0	10.0
HS-SFG1813HC-R33M	0.33	0.004	600	10.0	7.0
HS-SFG1813HC-R56M	0.56	0.010	200	7.7	6.0
HS-SFG1813HC-1R2M	1.2	0.017	140	5.3	4.4
HS-SFG1813HC-2R2M	2.2	0.035	100	3.5	3.1
HS-SFG1813HC-3R3M	3.3	0.040	80	3.0	2.7
HS-SFG1813HC-4R7M	4.7	0.054	50	2.6	2.2
HS-SFG1813HC-6R8M	6.8	0.080	45	2.2	1.8
HS-SFG1813HC-100M	10	0.111	40	1.9	1.5
HS-SFG1813HC-150M	15	0.170	30	1.5	1.2
HS-SFG1813HC-220M	22	0.250	25	1.2	1.0
HS-SFG1813HC-330M	33	0.350	20	0.99	0.82
HS-SFG1813HC-470M	47	0.470	15	0.87	0.72
HS-SFG1813HC-680M	68	0.730	10	0.68	0.56
HS-SFG1813HC-101M	100	1.110	8	0.53	0.47

1、Inductance tested at 100KHz, 0.1Vrms.

2、Isat is peak current for approximately 30% roll-off.

3、 $\Delta T=40^{\circ}\text{C}$  rise typ. at Irms (85 $^{\circ}\text{C}$  ambient.)

4、Operating temperature range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

5、Electrical specifications at 25 $^{\circ}\text{C}$ .

#### HS-SFG3316HC SERIES

Part Number	Inductance <sup>1</sup> ( $\mu$ H)	DCR(max) ( $\Omega$ )	SRF (typ.) (MHz)	Isat <sup>2</sup> (A)	Irms <sup>3</sup> (A rms)
HS-SFG3316HC-R33M	0.33	0.002	300	20.0	16.0
HS-SFG3316HC-R68M	0.68	0.005	200	13.0	12.0
HS-SFG3316HC-1R0M	1.0	0.006	100	11.0	10.0
HS-SFG3316HC-1R5M	1.5	0.008	90	9.0	9.0
HS-SFG3316HC-2R2M	2.2	0.011	90	7.8	7.4
HS-SFG3316HC-2R7M	2.7	0.012	65	7.0	6.6
HS-SFG3316HC-3R3M	3.3	0.014	65	6.4	5.9
HS-SFG3316HC-4R7M	4.7	0.018	45	5.4	4.8

1、Inductance tested at 100KHz, 0.1Vrms.

2、Inductance drop=10%typ. at Isat.

3、 $\Delta T=40^{\circ}\text{C}$  rise typ. at Irms.

# SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

## HSSFSG SERIES

### HS-SFG5022HC SERIES

Part Number	Inductance <sup>1</sup> ( $\mu$ H)	DCR (max) ( $\Omega$ )	SRF (typ.) (MHz)	Isat <sup>2</sup> (A)	Irms <sup>3</sup> (A rms)
HS-SFG5022HC-R78M	0.78	0.0026	156	30	15
HS-SFG5022HC-1R5M	1.5	0.0040	100	25	15
HS-SFG5022HC-2R2M	2.2	0.0061	75	20	12
HS-SFG5022HC-3R3M	3.3	0.0086	60	17	10
HS-SFG5022HC-3R9M	3.9	0.010	55	15	9.0
HS-SFG5022HC-4R7M	4.7	0.014	40	13	8.4
HS-SFG5022HC-6R0M	6.0	0.017	35	12	7.5
HS-SFG5022HC-7R8M	7.8	0.018	35	11	7.5
HS-SFG5022HC-100M	10	0.026	28	10	6.0
HS-SFG5022HC-150M	15	0.032	20	8	4.4

1、 Inductance tested at 100KHz, 0.1Vrms.

2、 Inductance drop=10%typ.at Isat.

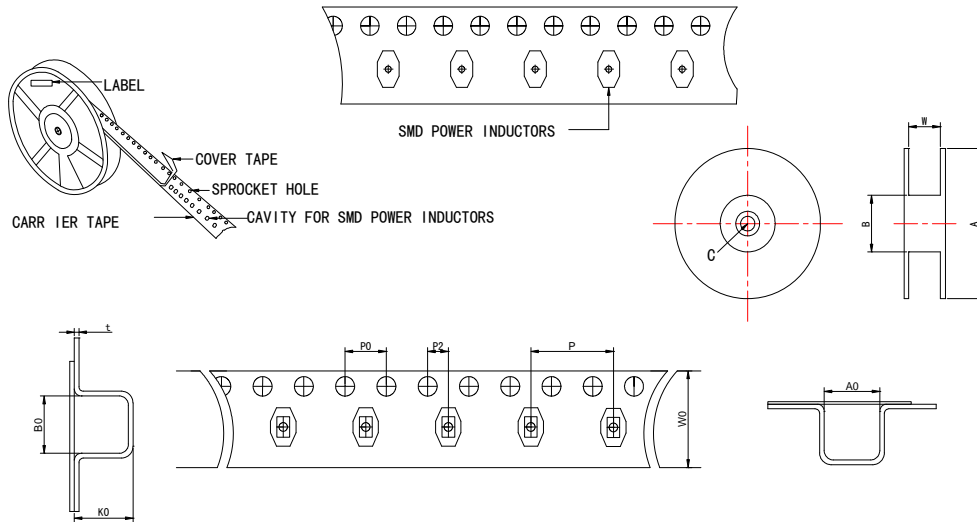
3、  $\Delta T=40^{\circ}\text{C}$  rise typ. at I rms.

4、 Operating temperature range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

5、 Electrical specifications at  $25^{\circ}\text{C}$ .

# SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

## HSSFG SERIES



### ● Reel Dimensions & Packing Unit

UNIT:mm

Part Number	Dimensions of Reel				Packaging Unit
	A	B	C	W	
HS-SFG1813HC	330	100.0±2.00	13.50±0.50	16.±0.50	1000pcs/r
HS-SFG3316HC	330	100.0±2.00	13.50±0.50	24.±0.50	750pcs/r
HS-SFG5022HC	330	100.0±2.00	13.50±0.50	32.±0.50	250pcs/r

### ● Carrier Tape Dimensions

UNIT:mm

Sym.	HS-SFG1813HC	HS-SFG3316HC	HS-SFG5022HC
A0	6.60±0.10	9.7±0.10	15.3±0.10
B0	9.40±0.10	13.30±0.10	22.50±0.10
K0	5.60±0.10	6.60±0.10	7.65±0.10
P	12.00±0.10	12.00±0.10	20.00±0.10
P0	4.00±0.10	4.00±0.10	4.00±0.10
P2	2.00±0.10	2.00±0.10	2.00±0.10
W0	16.00±0.30	24.00±0.30	44.00±0.30
t	0.4±0.10	0.4±0.10	0.40±0.10