

# SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

## HSI SERIES

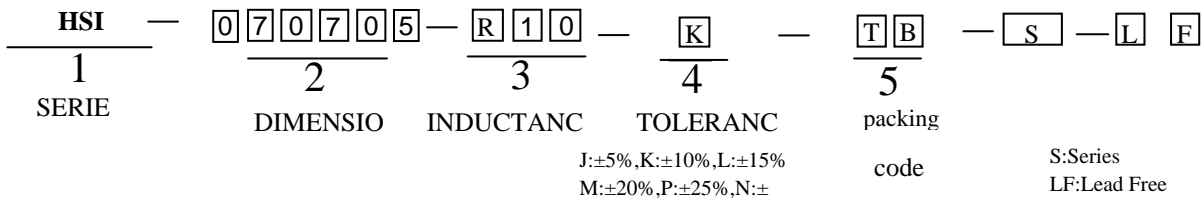
### 1. FEATURES:

- (1) Ultra low cost, very low DC resistance, Low noise .
- (2) Shielded construction, high frequency range up to 5MHz.
- (3) High current rating up to DC 105A.

### 2. APPLICATIONS:

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

### 3. PART NUMBER SYSTEM:



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### 4 . PHYSICAL CHARACTERISTICS:

TYPE	A	B	C	D	E	H	I	J	Shape
	Max	Max	Max	Ref	Ref	Ref	Ref	Ref	
070705	7.20	7.00	5.10	2.50	1.30	3.00	2.00	4.00	Fig.1
070707	7.50	7.50	7.50	2.00	1.80	2.50	2.30	3.00	Fig.1
100705	10.2	7.00	5.10	2.70	1.20	3.50	2.25	6.00	Fig.2
100705	10.2	7.00	5.10	2.50	1.50	3.30	2.20	6.35	Fig.1
100707	11.0	7.50	7.00	1.60	2.60	2.00	3.35	4.30	Fig.1
100775	11.0	7.50	7.50	1.60	2.60	2.00	3.35	4.30	Fig.1
100808	11.0	8.00	8.50	1.55	2.60	2.00	3.50	4.50	Fig.1
100865	10.4	8.00	6.50	2.30	2.54	2.79	3.05	4.32	Fig.1
101005	10.5	10.1	5.30	2.50	2.00	3.00	3.00	5.00	Fig.1
110707	12.0	7.60	7.20	1.90	3.20	2.50	3.75	4.50	Fig.1
111109	11.8	11.5	9.40	2.20	3.20	2.70	3.95	4.20	Fig.1
131305	13.5	13.2	5.30	5.00	2.00	5.50	3.00	8.00	Fig.1
131308	13.5	13.0	8.30	5.00	2.54	7.62	3.18	7.11	Fig.1
131309	14.5	13.3	9.50	3.00	2.40	3.50	3.15	8.50	Fig.1
150705	15.0	7.00	5.00	2.80	2.20	4.50	2.50	10.0	Fig.1

Fig.1

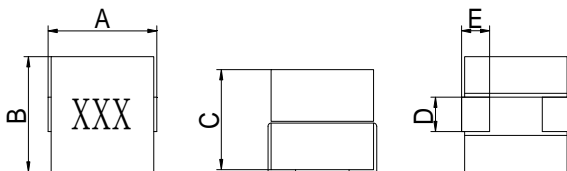
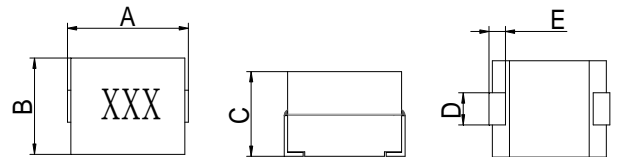
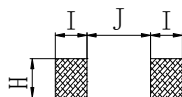
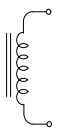


Fig.2



### Electrical Schematic & PAD Layout



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### 5 . ELECTRICAL CHARACTERISTICS:

#### HSI070705 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI070705-R10	100	0.26	50	40	30
HSI070705-R15	150	0.26	33	25	30
HSI070705-R20	200	0.26	22	15	30

#### HSI070707 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI070707-R12	120	0.29	50	40	35
HSI070707-R16	160	0.29	40	27	35
HSI070707-R22	220	0.29	27	20	35

#### HSI100705 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI100705-R10	100	0.29	80	57	40
HSI100705-R12	120	0.29	60	55	40
HSI100705-R15	150	0.29	40	35	40
HSI100705-R20	200	0.29	27	25	40
HSI100705-R22	220	0.29	25	20	40

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### HSI100707 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI100707-R12	120	0.37	80	70	37
HSI100707-R18	180	0.37	50	45	37
HSI100707-R22	220	0.37	40	35	37
HSI100707-R33	330	0.37	28	20	37
HSI100707-R40	400	0.37	21	16	37

### HSI100775 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI100775-R15	150	0.37 OR 0.29	60	55	37 OR 55
HSI100775-R20	200	0.37 OR 0.29	55	45	37 OR 55
HSI100775-R25	250	0.37 OR 0.29	40	29	37 OR 55
HSI100775-R30	300	0.37 OR 0.29	34	20	37 OR 55
HSI100775-R40	400	0.37 OR 0.29	23	12	37 OR 55

### HSI100808 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI100808-R15	150	0.5	72	65	40
HSI100808-R18	180	0.5	60	50	40
HSI100808-R23	230	0.5	52	40	40
HSI100808-R30	300	0.5	40	28	40
HSI100808-R45	450	0.5	20	15	40

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### HSI100865 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 8%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI100865-R12	120	0.48	74	63	40
HSI100865-R14	140	0.48	66	56	40
HSI100865-R17	170	0.48	55	48	40
HSI100865-R22	220	0.48	43	35	40
HSI100865-R30	300	0.48	30	25	40

### HSI101005 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 9%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI101005-R20	200	0.26	35	30	45
HSI101005-R25	250	0.26	28	22	45
HSI101005-R30	300	0.26	23	20	45

### HSI110707 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI110707-R15	150	0.29	65	50	44
HSI110707-R18	180	0.29	58	40	44
HSI110707-R22	220	0.29	45	35	44
HSI110707-R30	300	0.29	30	23	44
HSI110707-R40	400	0.29	23	16	44

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### HSI111109 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI111109-R23	230	0.3	65	50	40
HSI111109-R25	250	0.3	65	50	40
HSI111109-R33	330	0.3	46	40	40
HSI111109-R38	380	0.3	40	30	40
HSI111109-R47	470	0.3	35	25	40
HSI111109-R54	540	0.3	26	18	40

### HSI131305 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 10%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI131305-R22	220	0.155	40	35	50
HSI131305-R28	280	0.155	30	18	50
HSI131305-R31	310	0.155	24	15	50
HSI131305-R40	400	0.155	18	13	50
HSI131305-R52	520	0.155	13	9	50

### HSI131308 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 10%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI131308-R21	210	0.32	71	55	45
HSI131308-R26	260	0.32	60	45	45
HSI131308-R32	320	0.32	50	35	45
HSI131308-R44	440	0.32	35	25	45
HSI131308-R50	500	0.32	28	23	45

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### HSI131309 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI131309-R30	300	0.25	60	50	45
HSI131309-R36	360	0.25	52	40	45
HSI131309-R45	450	0.25	43	35	45
HSI131309-R53	530	0.25	34	20	45
HSI131309-R68	680	0.25	24	18	45

### HSI150705 SERIES

Part Number	Inductance (nH)	DCR(mohm) +/- 7%	Isat at 25°C (A)	Isat at 125°C (A)	Irms(A)
HSI150705-R10	100	0.47	105	80	53
HSI150705-R12	120	0.47	87	75	53
HSI150705-R15	150	0.47	72	60	53
HSI150705-R40	400	0.47	24	19.5	53