Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BPSC Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

SCDS Series

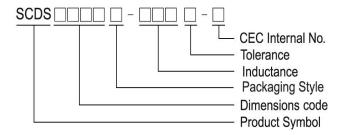
Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Various package size and wide inductance range

Applications

- AP Routers
- STBs
- LCD TVs and monitors
- Game consoles
- LED lightings
- DC/DC converters

Product Identification

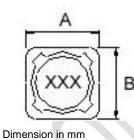


• T : Packaging: Tape and Reel

SCDS 73/ 74

Shape and Dimensions





Α

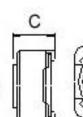
7.3±0.2

7.3±0.2

TYPE

SCDS73

SCDS74







Recommended Pattern

Dimension in mm

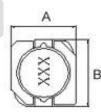
В	С	D
7.3±0.2	3.4+0	1.8
7.3±0.2	4.5+0	1.8

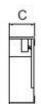
TYPE	Α	В	С
SCDS73	8.4	4.4	2.2
SCDS74	8.4	4.4	2.2

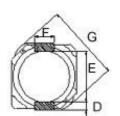
SCDS 103R/ 104R/ 105R

Shape and Dimensions

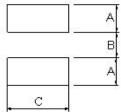








Recommended Pattern



Dimensions in mm

TYPE	Α	В	С	D	E	F	G
SCDS103R	10.3+0	10.5+0	3.1+0	1.2	7.7	3.0	13.5+0
SCDS104R	10.3+0	10.5+0	4 ⁺⁰	1.2	7.7	3.0	13.5+0
SCDS105R	10.3+0	10.5+0	5.1+0	1.2	7.7	3.0	13.5+0

Dimension in mm

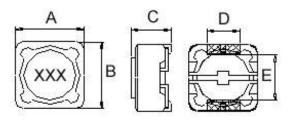
211110110101111111111	•		
TYPE	Α	В	С
SCDS103R	1.6	7.3	3.2
SCDS104R	1.6	7.3	3.2
SCDS105R	1.6	7.3	3.2



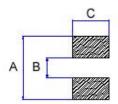
SCDS 124/125/127

Shape and Dimensions





Recommended Pattern



D:	ารเดทร	:	~~~
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TYPE	Α	В	С	D	E
SCDS124	12.5+0	12.5+0	4.5+0	5	7.6
SCDS125	12.5 ⁺⁰	12.5 ⁺⁰	6 ⁺⁰	5	7.6
SCDS127	12.5 ⁺⁰	12.5 ⁺⁰	8*0	5	7.6

Dimensions in mm

TYPE	Α	В	С
SCDS124	13	7	5.4
SCDS125	13	7	5.4
SCDS127	13	7	5.4

Standard Specifications

	Inductance		RDC (mΩ) Max									
Stamp	(μH)	SCDS 73	SCDS 74	SCDS 103R	SCDS 104R	SCDS 105R	SCDS 124	SCDS 125	SCDS 127			
R80	0.8		1			4.3						
1R0	1.0				7.5	4.0						
1R2	1.2				7.0				7.0			
1R5	1.5	30	20		8.1	5.8			8.0			
1R8	1.8	- 00	25		9.5	0.0			0.0			
2R2	2.2	30	25		10.5	11			11.5			
2R4	2.4		20		10.0				11.5			
2R5	2.5				10.5				11.0			
2R7	2.7		30		10.5							
3R3	3.3	40	35		13	10.4	15	15	13.5			
3R5	3.5	40	33		13	10.4	13	15	13.5			
3R8	3.8				13				13.3			
3R9	3.9				13		15					
4R7	4.7		35	30	18	12.3	18	18	15.8			
5R2	5.2		35	30	22	12.3	10	10	13.6			
5R2 5R6	5.6				27							
6R1	6.1				21				17.6			
6R4	6.4							10	17.6			
		60	45	25	27	10	23	18	20.0			
6R8	6.8	60	45	35	27 27	18	23		20.0			
7R0	7.0 7.6				21				20.0			
7R6					22	20		25	20.0			
8R2	8.2	70	40	50.0	33	20	00	25	04.0			
100	10	72	49	59	35	26	28	25	21.6			
120	12	98	58	04	50	33	38	27	24.3			
150	15	130	81	91	50	41	50	30	27.0			
180	18	140	91		70	46	57	34	39.2			
220	22	190	110		73	61	66	36	43.2			
270	27	210	150	-	90	69	80	51	45.9			
330	33	240	170	202	93	84	97	57	64.8			
390	39	320	230		128	106	132	68	72.9			
470	47	360	260	299	128	130	150	75	100			
560	56	470	350		213	149	190	110	110			
680	68	520	380		213	201	220	120	140			
820	82	690	430		280	227	260	140	160			
101	100	790	610		304	253	308	160	220			
121	120	890	660		F 22	303	380	170	250			
151	150	1270	880		506	370	530	230	280			
181	180	1450	980		7	419	620	290	350			
201	200	4050	4470		756	500	700	400	200			
221	220	1650	1170		756	500	700	400	390			
271	270	2310	1640			672	876	460	560			
331	330	2620	1860		1090	812	990	510	640			
391	390	2940	2850			953		690	700			
471	470	4180	3010		1600	1289		770	980			
561	560	4670	3620		2100	1430		860	1070			
681	680	5730	4630			1599		1200	1460			
821	820	6540	5200			1768		1340	1640			
102	1000	9440	6000			1989		1530	1820			

Note: When ordering, please specify tolerance code. Tolerance: $M=\pm20\%$, $T=\pm30\%$, $N=^{+40}_{-20}\%$

- Operating temperature range 40°C ~ 105°C(Including self temperature rise)
- Isat for Inductance drop 35% from its value without current
- Measure Equipment :

L: Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)

RDC: Chroma 16502

Rated Current: HP4284+42841A or WK3260B+WK3265B



Standard Specifications

	Inductance	Isat (A)										
Stamp	Inductance (μH)	SCDS	SCDS	SCDS	SCDS	SCDS	SCDS	SCDS	SCDS			
	(μπ)	73	74	103R	104R	105R	124	125	127			
R80	0.8					13.5						
1R0	1.0				11							
1R2	1.2								9.80			
1R5	1.5	4.00	5.00		10.	10.5			9.50			
1R8	1.8		4.00		8.5							
2R2	2.2	4.00	3.50		7.5	9.25			8.00			
2R4	2.4								8.00			
2R5	2.5				7.5							
2R7	2.7		3.50									
3R3	3.3	3.70	3.50		6.0	7.8	6.50	8.00	7.50			
3R5	3.5								7.50			
3R8	3.8				6.0							
3R9	3.9						6.50					
4R7	4.7		3.00	4.65	5.7	6.40	5.70	7.60	6.80			
5R2	5.2				5.5							
5R6	5.6				5.0							
6R1	6.1								6.60			
6R4	6.4							5.8				
6R8	6.8	2.00	2.50	3.84	5.0	5.40	4.90		6.20			
7R0	7.0				4.8							
7R6	7.6								5.90			
8R2	8.2				4.5	4.85	1	5.00				
100	10	1.68	1.84	3.18	4.4	4.45	4.50	4.00	5.40			
120	12	1.52	1.71	51.10		4.00	4.00	3.50	4.90			
150	15	1.33	1.47	2.60	3.6	3.60	3.20	3.30	4.50			
180	18	1.20	1.31	2.00	3.5	3.20	3.10	3.00	3.90			
220	22	1.07	1.23		2.9	2.95	2.90	2.80	3.60			
270	27	0.96	1.12		2.5	2.70	2.80	2.30	3.40			
330	33	0.91	0.96	1.74	2.3	2.50	2.70	2.10	3.00			
390	39	0.77	0.91	1.7.4	2.1	2.30	2.10	2.00	2.75			
470	47	0.76	0.88	1.43	2.1	2.00	1.90	1.80	2.50			
560	56	0.68	0.75	1.10	1.6	1.90	1.80	1.70	2.35			
680	68	0.61	0.69		1.5	1.65	1.50	1.50	2.10			
820	82	0.57	0.61		1.35	1.50	1.30	1.40	1.95			
101	100	0.50	0.60		1.35	1.35	1.20	1.30	1.70			
121	120	0.30	0.52		1.00	1.28	1.10	1.10	1.60			
151	150	0.43	0.46		1.15	1.12	0.95	1.00	1.42			
181	180	0.43	0.40		1.10	1.04	0.85	0.90	1.30			
201	200	0.00	0.72		0.92	1.04	0.00	0.00	1.50			
221	220	0.35	0.36		0.92	0.94	0.80	0.80	1.16			
271	270	0.33	0.34		0.02	0.94	0.60	0.75	1.06			
331	330	0.32	0.34		0.70	0.64	0.50	0.73	0.95			
391	390				0.70	0.70	0.50	0.65				
471	470	0.26 0.24	0.29 0.26		0.50	0.70		0.65	0.88 0.79			
561		0.24	1		0.50	0.60		0.54	0.79			
	560 680	0.22	0.23 0.22		0.40	0.54		0.54	0.73			
681												
821	820	0.18	0.20		I	0.50		0.43	0.60			

Tolerance Of Inductors

1.5 ~ 1000uH ± 20% 3.3 ~ 330uH ±20% SCDS 73 SCDS 124 SCDS 74 1.5 ~ 1000uH ± 20% SCDS 125 3.3 ~ 1000uH ± 20% 1.2 ~ 7.6uH +40₋₂₀% SCDS 103R 4.7~47uH ± 30% SCDS 127 SCDS 104R 10 ~ 1000uH ± 20% 1.0 ~ 470uH ± 30% SCDS 127

• SCDS 105R 0.8 ~ 1000uH ± 30%

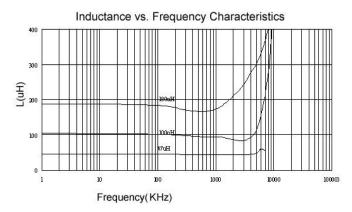
 $\bullet~$ Tolerance : M = $\pm 20\%$, T = $\pm 30\%$, N = $^{+40}\text{-}_{-20}\%$

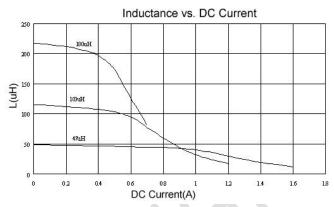


Curves of SCDS Series

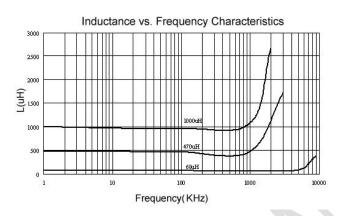
Test Instruments: HP4294 Impedance / Material Analyzer

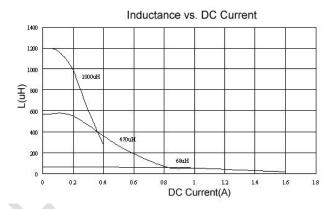
SCDS73





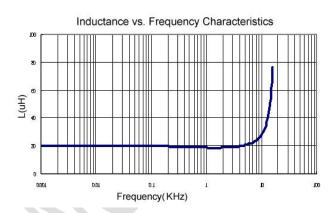
SCDS74

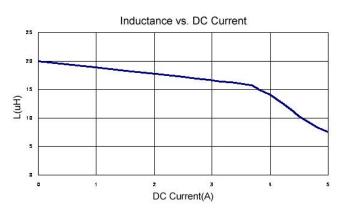




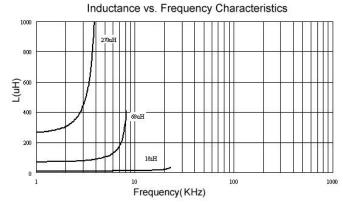
Test Instruments: HP4294 Impedance / Material Analyzer

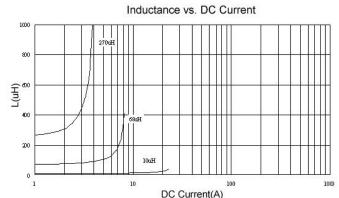
SCDS104R





SCDS124

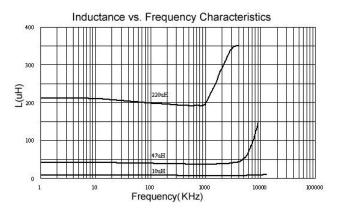


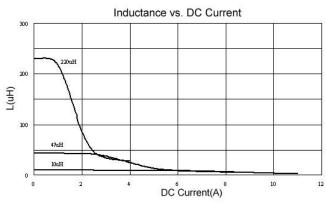


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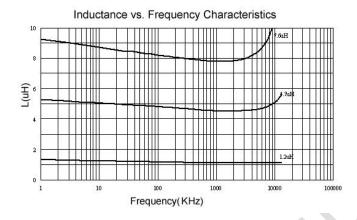


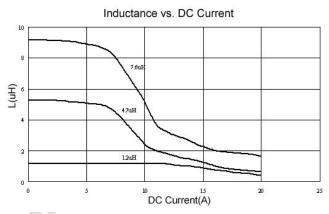
SCDS125





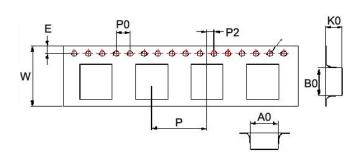
SCDS127



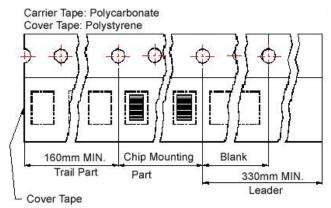


Packaging Specifications

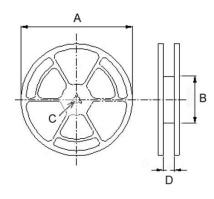
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE		Tape Dimensions						Reel Dimensions				Quantity		
ITPE	A0	В0	K0	D	Е	W	Р	P0	P2	Α	В	С	D	PCS / REEL
SCDS 73	7.6	7.6	3.6	1.55	1.75	16	12	4	2	330	100	13	16.0	1600
SCDS 74	7.6	7.6	5.0	1.55	1.75	16	12	4	2	330	100	13	16.0	1000
SCDS 103R	10.6	10.75	4.2	1.55	1.75	24	16	4	2	300	100	13	24.4	1000
SCDS 104R	10.6	10.75	4.2	1.5	1.75	24	16	4	2	330	100	13	24.4	1000
SCDS 105R	10.6	10.6	5.0	1.5	1.75	24	16	4	2	330	100	13	24.4	500
SCDS 124	13.0	12.8	5.1	1.55	1.75	24	16	4	2	330	100	13	24.4	500
SCDS 125	12.6	12.6	6.7	1.55	1.75	24	16	4	2	330	100	13	24.4	600
SCDS 127	12.6	12.6	8.7	1.55	1.75	24	16	4	2	330	100	13	24.4	500

