

SCDS Series

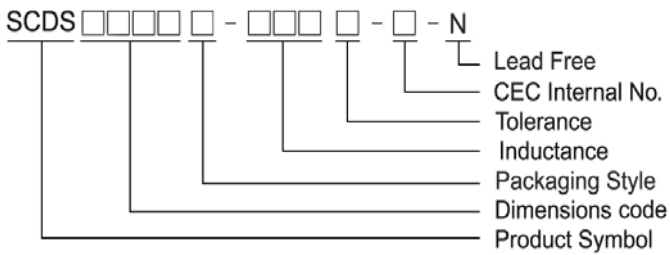
Features

- 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

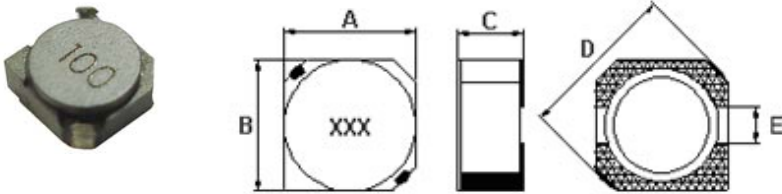
Product Identification



- T : Packaging: Tape and Reel
- CEC Internal No.: S: Base type terminals

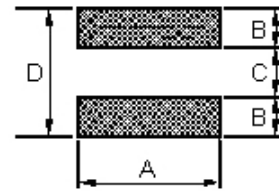
SCDS 3D16T-XXXX-S-N

Shape and Dimensions



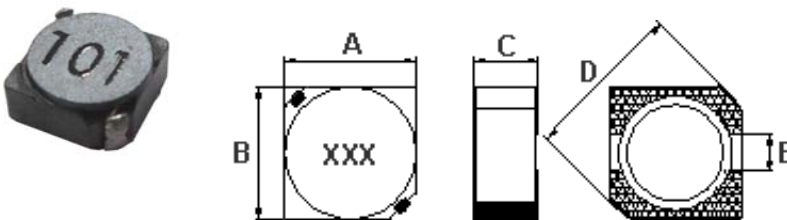
Dimensions in mm						Dimension in mm				
TYPE	A	B	C	D	E	TYPE	A	B	C	D
SCDS3D16	4 ⁺⁰	4 ⁺⁰	1.8 ⁺⁰	5.2 ⁺⁰	1.0	SCDS3D16	4.6	1.6	1.4	4.6

Recommended Pattern



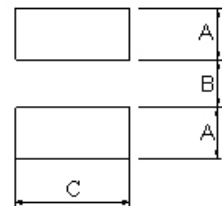
SCDS 4D18 ~ 6D38

Shape and Dimensions



Dimension in mm						Dimension in mm			
TYPE	A	B	C	D	E	TYPE	A	B	C
SCDS4D18	4.7 ± 0.3	4.7 ± 0.3	2.0 ⁺⁰	6.9 ⁺⁰	1.5	SCDS4D18	1.9	1.5	5.3
SCDS4D28	4.7 ± 0.3	4.7 ± 0.3	3.0 ⁺⁰	6.9 ⁺⁰	1.5	SCDS4D28	1.9	1.5	5.3
SCDS4D40	4.7 ± 0.3	4.7 ± 0.3	4 ⁺⁰	6.9 ⁺⁰	1.5	SCDS4D40	1.9	1.5	5.3
SCDS5D18	5.7 ± 0.3	5.7 ± 0.3	2.0 ⁺⁰	8.2 ⁺⁰	2.0	SCDS5D18	2.15	2.0	6.3
SCDS5D28	5.7 ± 0.3	5.7 ± 0.3	3.0 ⁺⁰	8.2 ⁺⁰	2.0	SCDS5D28	2.15	2.0	6.3
SCDS6D28	6.7 ± 0.3	6.7 ± 0.3	3.0 ⁺⁰	9.5 ⁺⁰	2.0	SCDS6D28	2.65	2.0	7.3
SCDS6D38	7 ⁺⁰	7 ⁺⁰	4 ⁺⁰	9.5 ⁺⁰	2.0	SCDS6D38	2.65	2.0	7.3

Recommended Pattern



SMD Shielded Power Inductors - SCDS Series

Standard Specifications

Stamp	Inductance (μ H)	RDC (m Ω) Max								Rated Current (A)							
		SCDS 3D16	SCDS 4D18	SCDS 4D28	SCDS 4D40	SCDS 5D18	SCDS 5D28	SCDS 6D28	SCDS 6D38	SCDS 3D16	SCDS 4D18	SCDS 4D28	SCDS 4D40	SCDS 5D18	SCDS 5D28	SCDS 6D28	SCDS 6D38
		1R0	1.0		45								1.72				
1R2	1.2			23.6								2.56					
1R5	1.5	52								1.55							
1R8	1.8			27.5								2.20					
2R2	2.2	72	75	31.3	22					1.20	1.32	2.04	4.6				
2R5	2.5					18									2.60		
2R7	2.7		105	43.3							1.28	1.60					
3R0	3.0						24	24							2.40	3.00	
3R3	3.3	85	110	49.2	33				20	1.10	1.04	1.57	3.4				3.50
3R9	3.9		155	64.8					27		0.88	1.44				2.60	
4R1	4.1					57								1.95			
4R2	4.2						31								2.20		
4R7	4.7	105	162	72.0	44					0.90	0.84	1.32	2.8				
5R0	5.0							31	24							2.40	2.90
5R3	5.3						38								1.90		
5R4	5.4					76								1.60			
5R6	5.6		170	100.9							0.80	1.17					
6R0	6.0							35								2.25	
6R2	6.2					96	45		27					1.40	1.80		2.50
6R8	6.8	170	200	108.9	46					0.73	0.76	1.12	2.6				
7R3	7.3							54								2.10	
7R4	7.4								31								2.30
8R2	8.2		245	117.5			53				0.68	1.04			1.60		
8R6	8.6							58								1.85	
8R7	8.7								34								2.20
8R9	8.9					116								1.25			
100	10	210	280	128.3	150	124	65	65	38	0.55	0.61	1.00	1.8	1.20	1.30	1.70	2.00
120	12		320	131.6		153	76	70	53		0.56	0.84		1.10	1.20	1.55	1.70
150	15	295	360	149.0	210	196	103	84	57	0.45	0.50	0.76	1.6	0.97	1.10	1.40	1.60
180	18		400	166.0		210	110	95	92		0.48	0.72		0.85	1.00	1.32	1.50
220	22	430	480	235.0	270	290	122	128	96	0.40	0.41	0.70	1.4	0.80	0.90	1.20	1.30
270	27		570	261.0		330	175	142	109		0.35	0.58		0.75	0.85	1.05	1.20
330	33	675	694	331.3		386	189	165	124	0.32	0.32	0.56		0.65	0.75	0.97	1.10
390	39		800	383.7		520	212	210	138		0.30	0.50		0.57	0.70	0.86	1.00
470	47		950	587.0		595	250	238	150		0.28	0.48		0.54	0.62	0.80	0.95
560	56		1080	624.5		665	305	277	202		0.26	0.41		0.50	0.58	0.73	0.85
680	68		1300	699.0		840	355	304	234		0.24	0.35		0.43	0.52	0.65	0.75
820	82			914.8		978	463	390	324			0.32		0.41	0.46	0.60	0.70
101	100			1020		1200	520	535	358			0.29		0.36	0.42	0.54	0.65
121	120			1270								0.27					
151	150			1350								0.24					
181	180			1540								0.22					

Note: When ordering, please specify tolerance code. Tolerance: M=±20%, T=±30%, N = ⁺⁴⁰/₋₂₀%

- Operating temperature range - 30°C ~ 100°C(Including self - temperature rise)
- Rated Current : DC current that will cause L drop approximately 35% over its nominal value or DC current cause the temperature rising approximately $\Delta t=40^{\circ}\text{C}$, whichever is lower

SMD Shielded Power Inductors - SCDS Series

● Measure Equipment :

Test Freq L : SCDS 3D16(100kHz/ 0.1V) , 4D28/ 4D40 (100kHz/ 1V) , SCDS 5D18/ 5D28/ 6D28/ 6D38 (10kHz/ 1V)

SCDS 127: 1.2~7.6μH (100kHz/ 1V), 10~1000μH (1kHz/ 1V), SCDS 4D18: 1.0~8.2μH (7.96MHz/ 1V), 10~39μH (100kHz/ 1V)

L : Agilent/ E4980 or HP4284A

RDC : CHEN HWA 502

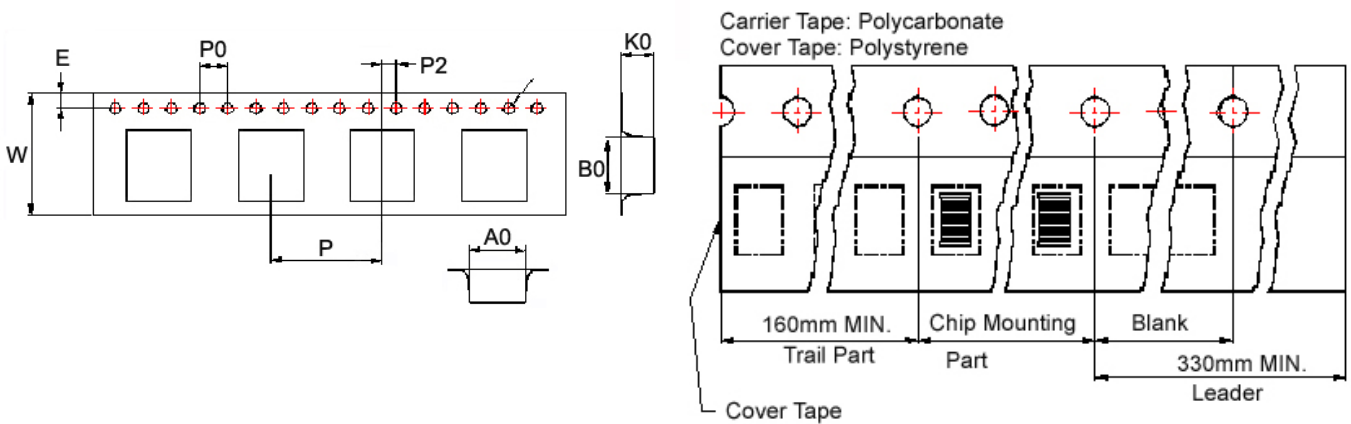
Rated Current : HP4284+42841A or WK3260B+WK3265B

Tolerance Of Inductors

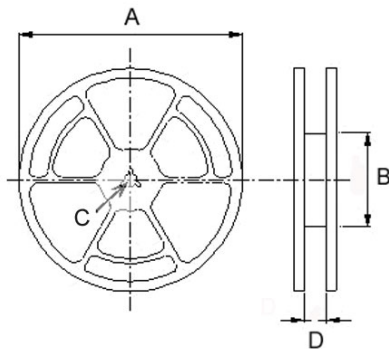
- SCDS 3D16 1.5 ~ 33μH ± 30%
- SCDS 4D18 1.0 ~ 68μH ± 30%
- SCDS 4D28 1.2 ~ 180μH ± 30%
- SCDS 4D40 2.2 ~ 22μH ± 30%
- Tolerance : M = ±20% , T = ±30% , N = ⁺⁴⁰/₋₂₀%
- SCDS 5D18 4.1 ~ 100μH ± 30%
- SCDS 5D28 2.5 ~ 100μH ± 30%
- SCDS 6D28 3.0 ~ 100μH ± 30%
- SCDS 6D38 3.3 ~ 100uH ± 30%

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D	
SCDS 3D16	4.1	4.1	2.0	1.5	1.75	12	8	4	2	178	60	13	13.2	1000
SCDS 4D18	5.3	5.3	2.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000
SCDS 4D28	5.3	5.3	3.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000
SCDS 4D40	5.35	5.35	4.1	1.55	1.75	12	8	4	2	330	100	13	13.4	1000
SCDS 5D18	6.2	6.2	2.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000
SCDS 5D28	6.2	6.2	3.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000
SCDS 6D28	7.25	7.25	3.35	1.55	1.75	16	12	4	2	330	100	13	16.0	1500
SCDS 6D38	7.1	7.1	4.1	1.55	1.75	16	12	4	2	330	100	13	16.0	1000