

SCDS Series

SMT Power Inductors

CONFIGURATION AND DIMENSIONS

Dimensions : mm

TYPE	SHAPES AND DIMENSION		
SCDS62T (3.3μH ~ 330μH)			
SCDS64T (10μH ~ 1000μH)			
SCDS73 (10μH ~ 1.0mH)			
SCDS74 (10μH ~ 1.0mH)			
SCDS104R (1.5μH ~ 330μH)			
SCDS125 (10μH ~ 1.0mH)			
SCDS127 (10μH ~ 47mH)			

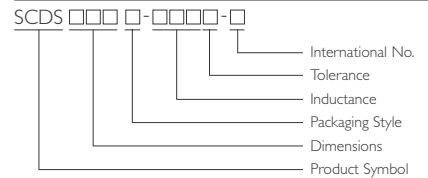


OUTLINE

SMT power inductors are formed by directly connected ferrite electrode with magnetic shielding.

- T : Packing : Tape and Reel
- HP : Low DCR
- LD : High Power
- Tolerance : K=±10% ; M=±20% ; T=±30%
- CEC Internal No. B: Silver plated terminals (3D12~6D38); S: Base type terminals (2D11~2D18HP & 62T&127)
- Note : YAGEO will start to release SCDS Series inductor with lead-free terminals that meet SONY SS-00259's criteria for lead-free product in Q2 of 2004, and YAGEO Internal No will be changed to "N" as identification.

PRODUCT IDENTIFICATION



Features

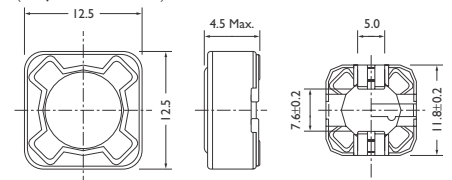
- Available in magnetically shielded.
- Low DC resistance.
- Suitable for large currents.
- Ideal for a variety of DC - DC converter inductor applications.
- Available on tape and reel for auto surface mounting.

Applications

- Power supply for VTRs.
- OA equipment.
- LCD televisions.
- Notebook PCs.
- Portable communication equipment.
- DC / DC converters, etc.

SCDS124

(3.9μH ~ 330mH)





STANDARD SPECIFICATIONS

Stamp	Inductance (μH)	D.C.R.(mΩ)Max.								Rated Current(A)Max.							
		SCDS 62T	SCDS 64T	SCDS 73	SCDS 74	SCDS 104R	SCDS 124	SCDS 125	SCDS 127	SCDS 62	SCDS 64	SCDS 73	SCDS 74	SCDS 104R	SCDS 124	SCDS 125	SCDS 127
1R0	1.0																
1R2	1.2								7.0								
1R5	1.5					8.1								10.0			
1R8	1.8																9.80
2R2	2.2																
2R4	2.4								11.5								
2R5	2.5					10								7.5			
2R7	2.7																8.00
3R0	3.0																
3R3	3.3	68								1.94							
3R5	3.5								13.5								
3R8	3.8					13								6.0			
3R9	3.9						15								6.50		
4R1	4.1																
4R2	4.2																
4R7	4.7	80						18		15.8	1.63					5.70	
5R0	5.0																
5R2	5.2					22								5.5			
5R3	5.3																
5R4	5.4																
5R5	5.5	96															
5R6	5.6																
6R0	6.0																
6R1	6.1								17.6								
6R2	6.2																6.60
6R8	6.8	100						23								4.90	
7R0	7.0					27								4.8			
7R3	7.3																
7R4	7.4																
7R6	7.6								20.0								5.90
8R2	8.2	100															
8R6	8.6									1.14							
8R7	8.7																
8R9	8.9																
100	10	150	120	72	49	35	28	25	21.6	1.10	1.35	1.68	1.84	4.4	4.50	4.00	5.40
120	12	200	130	98	58		38	27	24.3	1.00	1.22	1.52	1.71		4.00	3.50	4.90
150	15	230	180	130	81	50	50	30	27.0	0.90	1.11	1.33	1.47	3.6	3.20	3.30	4.50
180	18	270	240	140	91		57	34	39.2	0.80	1.02	1.20	1.31		3.10	3.00	3.90
220	22	340	270	190	110	73	66	36	43.2	0.74	0.91	1.07	1.23	2.9	2.90	2.80	3.60
270	27	380	300	210	150		80	51	45.9	0.66	0.82	0.96	1.12		2.80	2.30	3.40
330	33	450	330	240	170	93	97	57	64.8	0.59	0.74	0.91	0.96	2.3	2.70	2.10	3.00
390	39	490	370	320	230		132	68	72.9	0.54	0.69	0.77	0.91		2.10	2.00	2.75
470	47	690	520	360	260	128	150	75	100	0.50	0.62	0.76	0.88	2.1	1.90	1.80	2.50
560	56	780	560	470	350		190	110	110	0.46	0.58	0.68	0.75		1.80	1.70	2.35
680	68	1070	630	520	380	213	220	120	140	0.42	0.51	0.61	0.69	1.5	1.50	1.50	2.10
820	82	1210	710	690	430		260	140	160	0.38	0.46	0.57	0.61		1.30	1.40	1.95
101	100	1390	1030	790	610	304	308	160	220	0.34	0.42	0.50	0.60	1.35	1.20	1.30	1.70
121	120	1900	1150	890	660		380	170	250	0.31	0.38	0.49	0.52		1.10	1.10	1.60
151	150	2180	1680	1270	880	506	530	230	280	0.28	0.35	0.43	0.46	1.15	0.95	1.00	1.42
181	180	2770	1870	1450	980		620	290	350	0.26	0.32	0.39	0.42		0.85	0.90	1.30
221	220	3120	2080	1650	1170	756	700	400	390	0.23	0.29	0.35	0.36	0.92	0.80	0.80	1.16
271	270	4380	2370	2310	1640		876	460	560	0.22	0.26	0.32	0.34		0.60	0.75	1.06
331	330	4940	2670	2620	1860	1.09	990	510	640	0.19	0.23	0.28	0.32	0.70	0.50	0.68	0.95
391	390		2940	2940	2850			690	700		0.22	0.26	0.29			0.65	0.88
471	470		3930	4180	3010			770	980		0.20	0.24	0.26			0.58	0.79

• Test Freq.(L): SCDS62: 3.3 ~ 8.2μH(7.96MHz/1V), 10~82μH(2.52MHz/1V), 100 ~ 330μH(1KHz/1V)
SCDS64/73/74/125/127: (1KHz/1V)

• Other type Rated current : The rate current indicastes the current when the inductance decreases to 65%. Over of it's nominal value or D.C.current when the temperature rising Δt =40°C lower, whichever is lower.

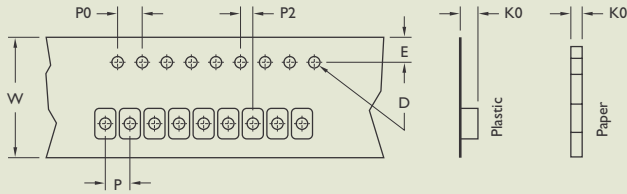
• Test Instrument :L : HP4192A LF IMPEDANCE ANALYZER
RDC : CHEN HWA 502BC
Rated current: HP4284+42841A or Ch1061+CH301A

Tolerance Of Inductors

- SCDS62 3.3~330μH ± 20%(M)
- SCDS64 10~1000μH ± 20%(M)
- SCDS73 10~1000μH ± 20%(M)
- SCDS74 10~1000μH ± 20%(M)
- SCDS104R 1.5~330μH ± 30%(T)
- SCDS124 3.9~330μH ± 20%(M)
- SCDS125 1.0~1000μH ± 20%(M)
- SCDS127 1.2~7.6μH^{+40, -20%}(N)



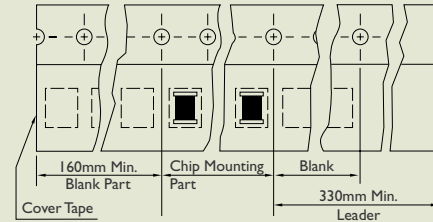
TAPE DIMENSIONS



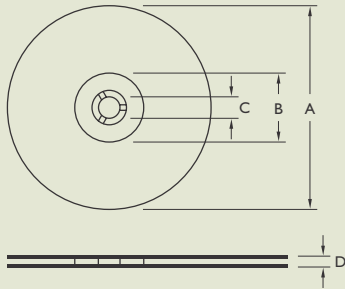
TAPE MATERIAL

Carrier Tape : Polystyrene

Cover Type : Polyethylene

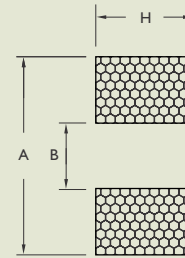


REEL DIMENSIONS



RECOMMENDED PATTERN

Land Pattern



Dimensions : mm

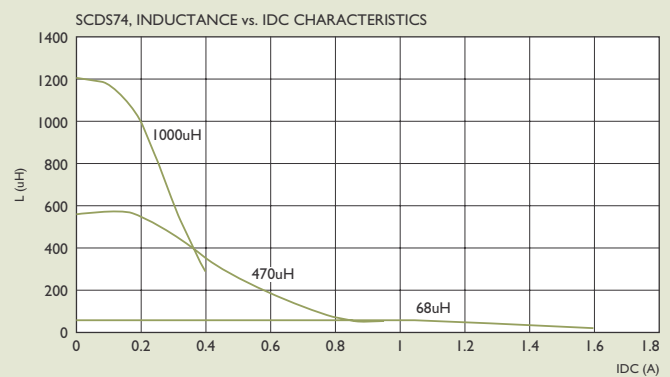
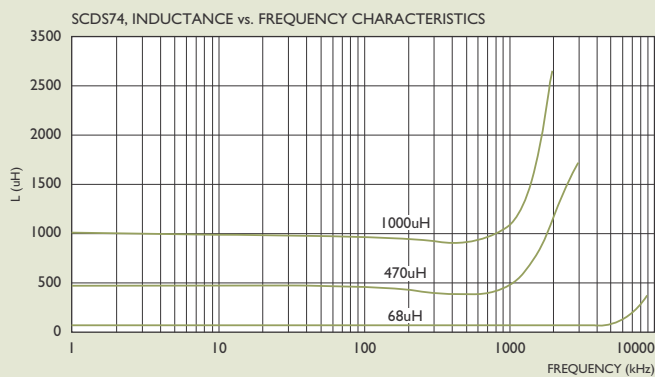
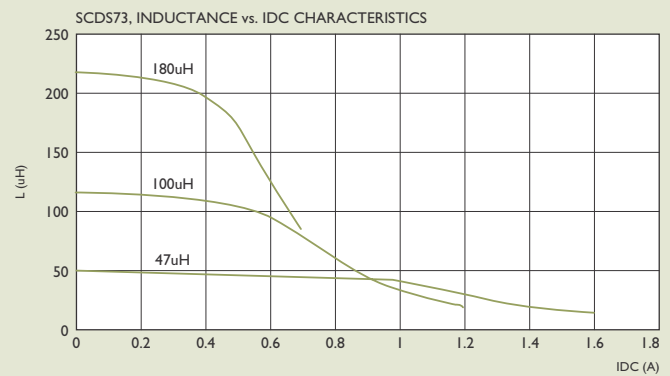
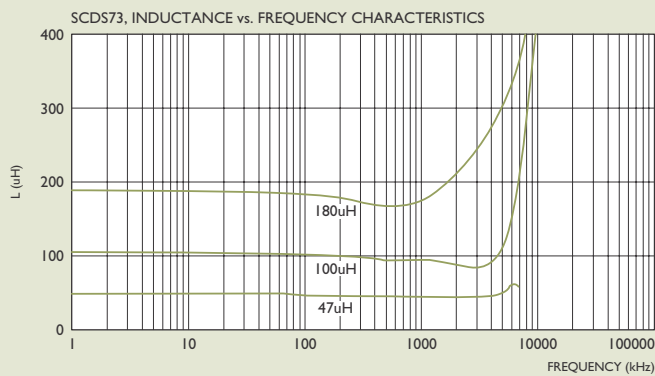
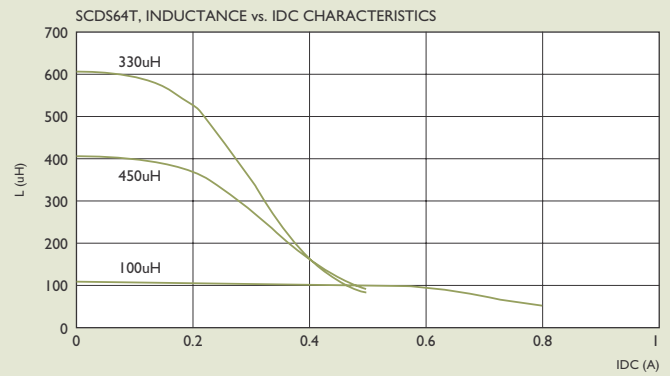
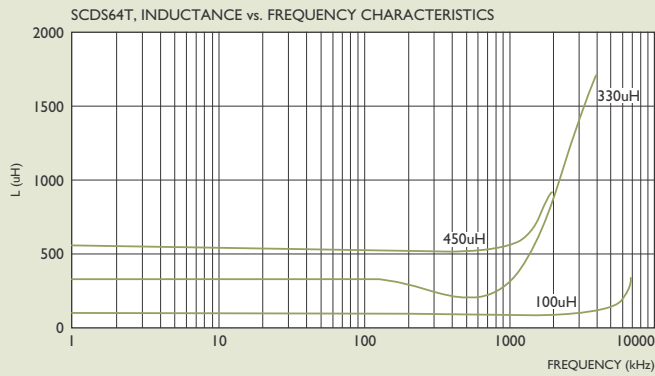
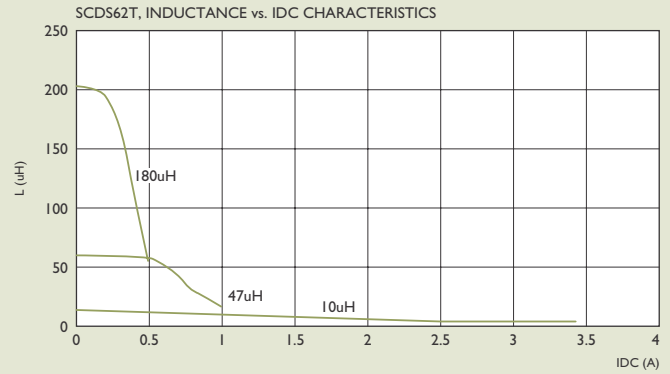
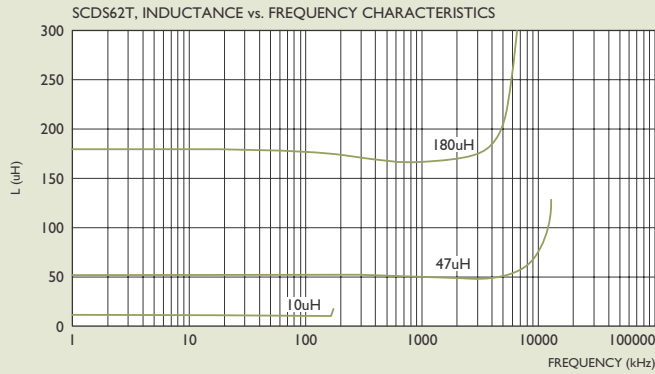
TYPE	TAPE DIMENSIONS							RECOMMENDED PATTERN			REEL DIMENSIONS				QUANTITY
	K0	D	E	W	P	P0	P2	A	B	C	A	B	C	D	PCS/REEL
SCDS62T	3.4	1.55	1.75	16	12	4	2	8.1	4	2.5	330	100	13	17.4	1500
SCDS64T	4.9	1.55	1.75	16	12	4	2	8.1	4	2.5	330	100	13	17.4	1000
SCDS73T	3.6	1.55	1.75	16	12	4	2	8.4	4.4	2.2	330	100	13	17.4	1600
SCDS74T	5.0	1.55	1.75	16	12	4	2	8.4	4.4	2.2	330	100	13	17.4	1000
SCDS124T	5.1	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	500
SCDS125T	6.7	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	600
SCDS127T	8.7	1.55	1.75	24	16	4	2	13	7	5.4	330	100	13	24.4	500



TYPICAL ELECTRICAL CHARACTERISTICS

Curves of SCD Series

Test Instruments : HP4291A Impedance / Material Analyzer



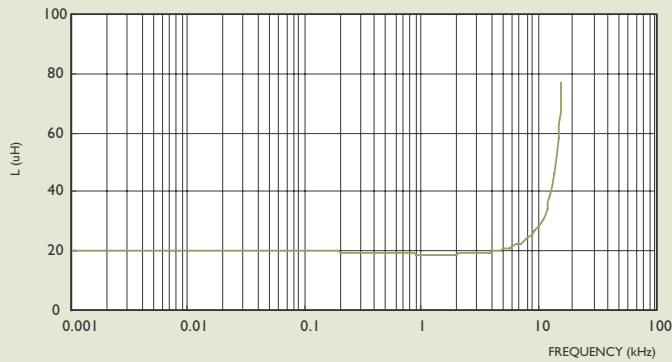


TYPICAL ELECTRICAL CHARACTERISTICS

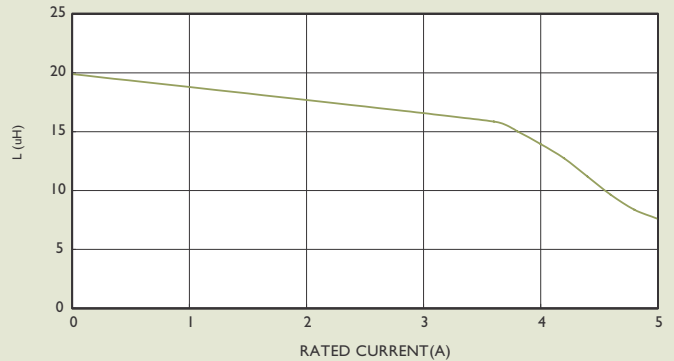
TCurves of SCD Series

Test Instruments : HP4291A Impedance / Material Analyzer

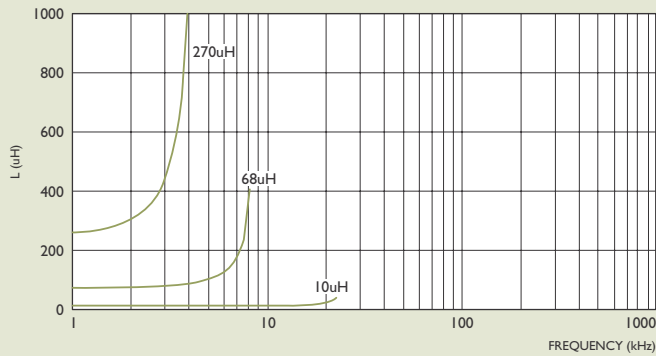
SCDS104R-220MS, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



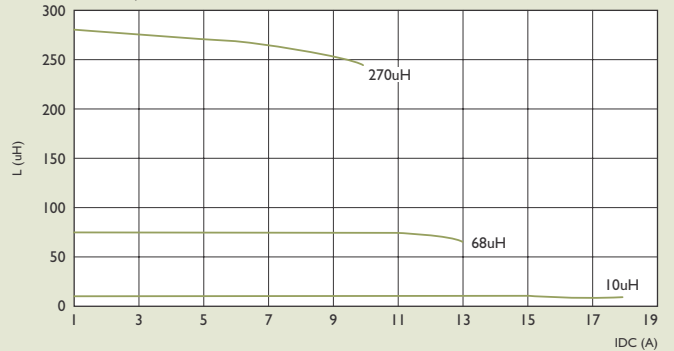
SCDS104R-220M-S



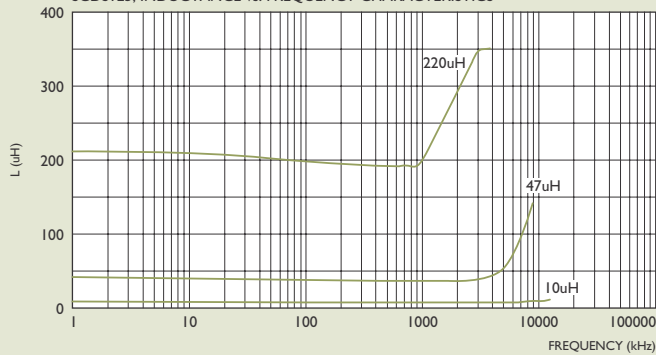
SCDS124, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



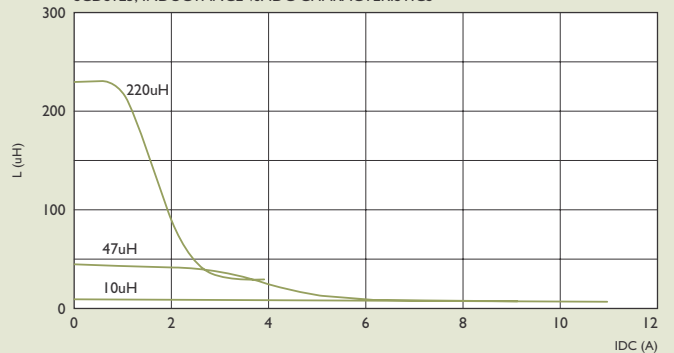
SCDS124, INDUCTANCE vs. IDC CHARACTERISTICS



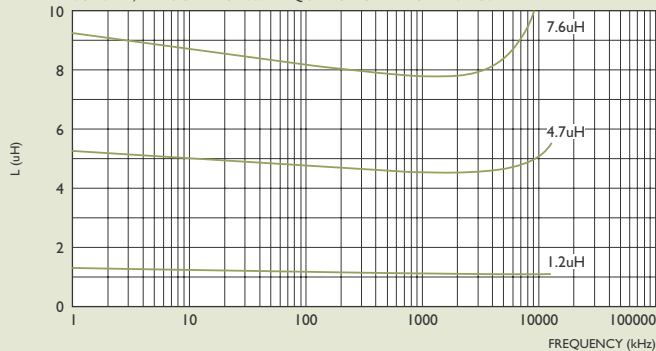
SCDS125, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



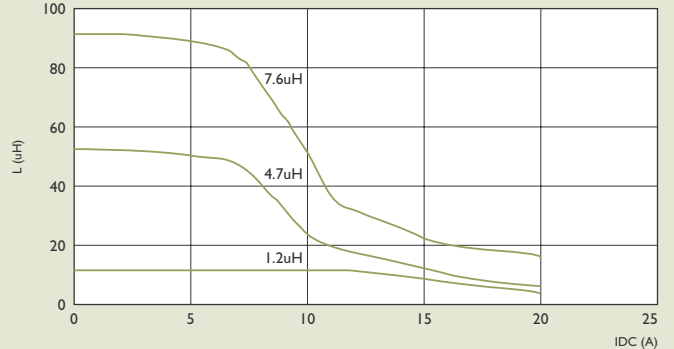
SCDS125, INDUCTANCE vs. IDC CHARACTERISTICS



SCDS127, INDUCTANCE vs. FREQUENCY CHARACTERISTICS



SCDS127, INDUCTANCE vs. IDC CHARACTERISTICS





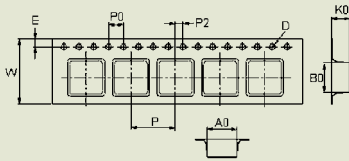
TYPICAL ELECTRICAL CHARACTERISTICS

Test Instruments : HP4291A Impedance / Material Analyzer

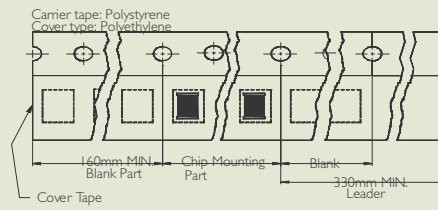
Packaging Specifications

SCDS 2D11 ~ 6D38

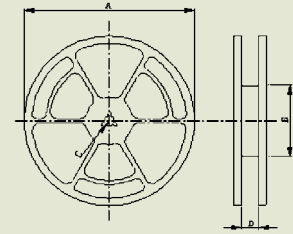
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS / REEL	Recommended Pattern	
	A0	B0	K0	D	E	W	P	P0	P2	A	B	C	D		A	B
SCDS 2D11	3.3	3.3	1.3	1.5	1.75	12	8	4	2	178	60	13	13.2	1500	1.3	1.7
SCDS 2D14	3.3	3.3	1.6	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS2D18LD	3.3	3.3	1.9	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS 2D18HP	3.3	3.3	1.9	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.3	1.7
SCDS 3D12	4.2	4.2	1.25	1.5	1.75	12	8	4	2	330	100	13	13.4	5000	4.6	1.6
SCDS 3D16	4.3	4.3	2.1	1.5	1.75	12	8	4	2	178	60	13	13.2	1000	1.4	2.4
SCDS 4D18	5.3	5.3	2.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	1.9	1.5
SCDS 4D28	5.3	5.3	3.4	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	1.9	1.5
SCDS 5D18	6.2	6.2	2.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	2.15	2.0
SCDS 5D28	6.2	6.2	3.2	1.5	1.75	12	8	4	2	330	100	13	13.4	2000	2.15	2.0
SCDS 6D28	7.2	7.2	3.2	1.5	1.75	16	12	4	2	330	100	13	17.4	1500	2.65	2.0
SCDS 6D38	7.1	7.1	4.1	1.5	1.75	16	12	4	2	330	100	13	17.4	1000	2.65	2.0