

PSD Series

Feature

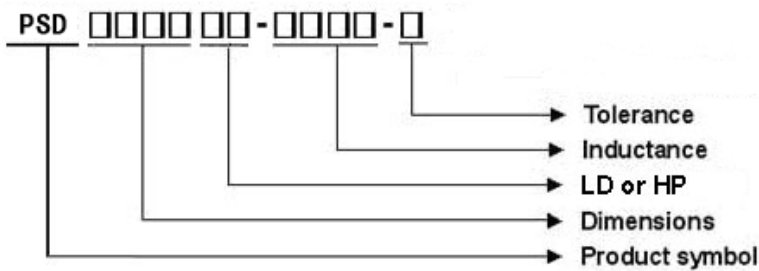
- RoHS compliant
- Available in magnetically shielded.
- Low DC resistance.
- Suitable for large currents.
- Ideal for a variety of DC – DC converter inductor applications.
- Available on tape and reel for auto surface mounting.

Applications

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

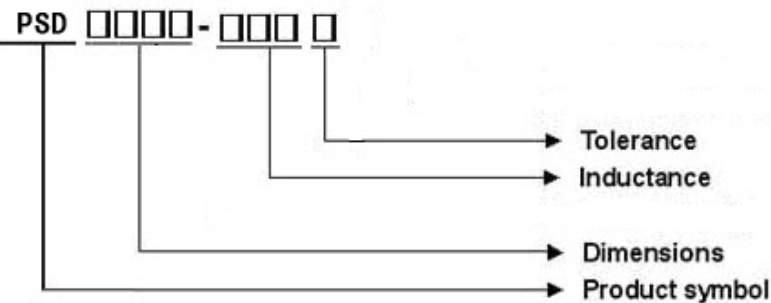
Product Identification

PSD



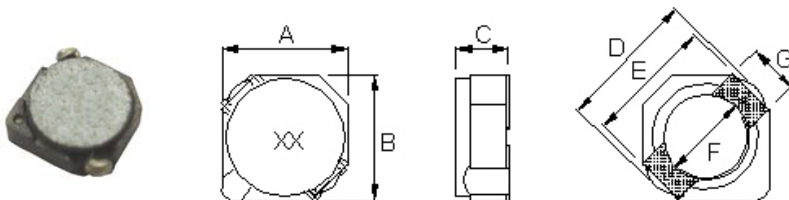
- HP : High Power
- LD : Low DCR

PSD3D16



PSD2D09/2D11/2D14/2D18LD/ 2D18

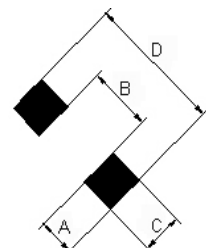
Shapes and Dimensions



Dimension in mm

TYPE	A	B	C	D	E	F	G
PSD2D09	3.2 ⁺⁰	3.2 ⁺⁰	1.0 ⁺⁰	4.5 ⁺⁰	3.3	2.1	1.0
PSD2D11	3.2 ⁺⁰	3.2 ⁺⁰	1.2 ⁺⁰	4.5 ⁺⁰	3.3	2.1	1.0
PSD2D14	3.2 ⁺⁰	3.2 ⁺⁰	1.55 ⁺⁰	4.5 ⁺⁰	3.3	2.1	1.0
PSD2D18LD	3.2 ⁺⁰	3.2 ⁺⁰	2.0 ⁺⁰	4.5 ⁺⁰	3.3	2.1	1.0
PSD2D18HP	3.2 ⁺⁰	3.2 ⁺⁰	2.0 ⁺⁰	4.5 ⁺⁰	3.3	2.1	1.0

Recommended Pattern

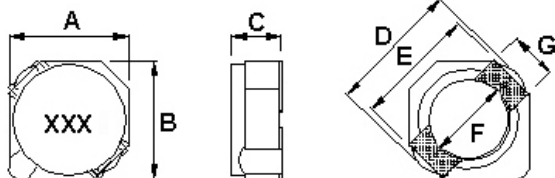
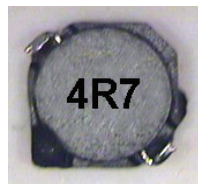


Dimensions in mm

TYPE	A	B	C	D
PSD2D09	1.3	1.7	1.3	4.3
PSD2D11	1.3	1.7	1.3	4.3
PSD2D14	1.3	1.7	1.3	4.3
PSD2D18LD	1.3	1.7	1.3	4.3
PSD2D18HP	1.3	1.7	1.3	4.3

PSD3D11/3D11HP

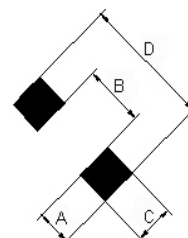
Shapes and Dimensions



Dimension in mm

TYPE	A	B	C	D	E	F	G
PSD3D11	4 ⁺⁰	4 ⁺⁰	1.2 ⁺⁰	5.2 ⁺⁰	4.4	2.8	1.1
PSD3D11HP	4 ⁺⁰	4 ⁺⁰	1.2 ⁺⁰	5.2 ⁺⁰	4.4	2.8	1.1

Recommended Pattern

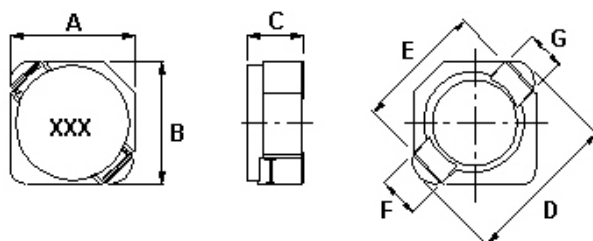


Dimensions in mm

TYPE	A	B	C	D
PSD3D11	1.4	2.4	1.5	5.2
PSD3D11HP	1.4	2.4	1.5	5.2

PSD 3D16-XXX

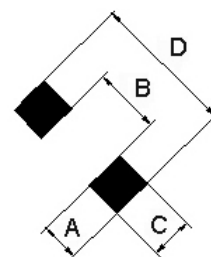
Shapes and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E	F	G
PSD3D16	4 ⁺⁰	4 ⁺⁰	1.8 ⁺⁰	5.2 ⁺⁰	4.4Typ	1.4 ⁺⁰	1.1Typ

Recommended Pattern

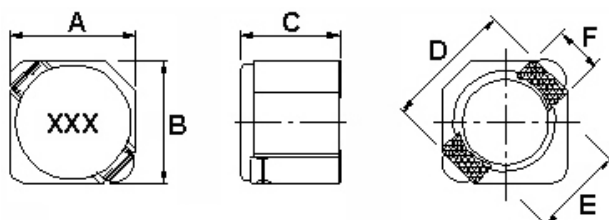
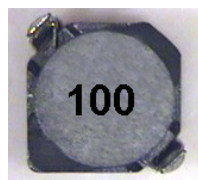


Dimension in mm

TYPE	A	B	C	D
PSD3D16	1.4	2.4	1.5	5.2

PSD3D28/3D28LD

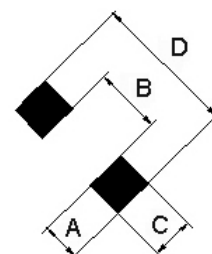
Shapes and Dimensions



Dimension in mm

TYPE	A	B	C	D	E	F
PSD3D28	4 ⁺⁰	4 ⁺⁰	3 ⁺⁰	4.4	2.8	1.1
PSD3D28LD	4 ⁺⁰	4 ⁺⁰	3 ⁺⁰	4.4	2.8	1.1

Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
PSD3D28	1.4	2.4	1.5	5.2
PSD3D28LD	1.4	2.4	1.5	5.2

Stamp	Inductance (μ H)	D.C.R (m Ω) Max									
		PSD 2D09	PSD 2D11	PSD 2D14	PSD 2D18LD	PSD 2D18HP	PSD 3D11	PSD 3D11HP	PSD 3D16	PSD 3D28	PSD 3D28LD
R60	0.6							59			
1R0	1.0								40		
1R2	1.2	97.5						82			
1R5	1.5	110	68	63				104	52		
1R7	1.7					44					
1R8	1.8	131.3		75							
2R2	2.2	143.8	98	94	41	60		143	72		
2R7	2.7	150		106			78				
3R3	3.3	193.8	123	125	54	86		182	85	72.1	
3R9	3.9	225		138							
4R7	4.7	287.5	170	169	78	140	123	234	105	88.3	
5R6	5.6	325		188					135		
6R3	6.3					160					
6R8	6.8	425.	260	213	106		180	377	170	119	
8R2	8.2	475		281			204				
100	10	537.5	400	294	180	245	240	413	210	145	95
120	12			394			276	585			100
150	15				220	345	372	653	295	213	115
180	18						468	888			125
220	22				320		540	1010	430	335	145
270	27						726				175
330	33				460		822		675	481	215
390	39						942				225
470	47				660					599	305
560	56										325
680	68										470
820	82										540
101	100								2750		610
121	120										755
151	150										880
181	180										1130
221	220										1270

Test Freq. (L): PSD 2D09/ 2D11/ 2D14/ 2D18LP /2D18HP/3D11/3D11HP/3D28/3D28LD (100KHz/ 1V)

PSD 3D16 (100KHz/ 0.1V)

Other type: Rated current: The rated current indicates the current when the inductance decrease to 65%. Over of it's nominal value or

D.C. current when the temperature rising $\Delta t=40^{\circ}\text{C}$ lower, whichever is lower.

Test Instrument: L: HP4192A LF Impedance analyzer

RDC: CH502BC

Rated Current: HP4284+42841A or CH1061 + CH301A

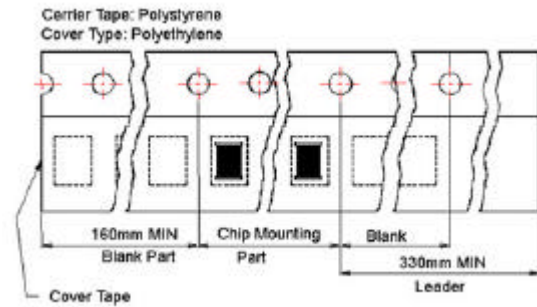
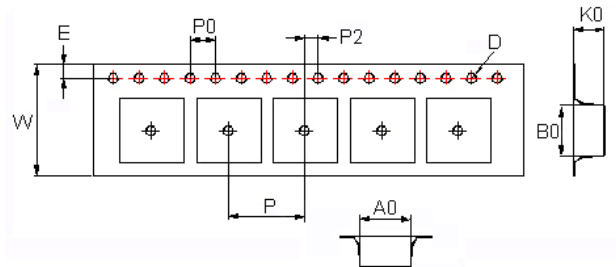
Stamp	Inductance (μ H)	Rated Current (A)									
		PSD 2D09	PSD 2D11	PSD 2D14	PSD 2D18LD	PSD 2D18HP	PSD 3D11	PSD 3D11HP	PSD 3D16	PSD 3D28	PSD 3D28LD
R60	0.6							2.90			
1R0	1.0								1.60		
1R2	1.2	0.8						2.00			
1R5	1.5	0.73	0.90	1.80				1.85	1.55		
1R7	1.7					1.85					
1R8	1.8	0.65		1.65							
2R2	2.2	0.60	0.78	1.50	0.85	1.60		1.60	1.20		
2R7	2.7	0.53		1.35			0.53				
3R3	3.3	0.47	0.60	1.20	0.75	1.45		1.25	1.10	2.00	
3R9	3.9	0.45		1.10							
4R7	4.7	0.41	0.50	1.00	0.63	1.20	0.40	1.00	0.90	1.65	
5R6	5.6	0.37		0.95					0.80		
6R3	6.3					1.05					
6R8	6.8	0.33	0.44	0.85	0.52		0.34	0.85	0.73	1.24	
8R2	8.2	0.30		0.80			0.32				
100	10	0.28	0.35	0.70	0.43	0.85	0.28	0.80	0.55	1.05	0.50
120	12			0.62			0.25	0.64			0.45
150	15				0.35	0.70	0.23	0.58	0.45	0.90	0.40
180	18						0.21	0.52			0.35
220	22				0.30		0.19	0.45	0.40	0.76	0.33
270	27						0.17				0.29
330	33				0.24		0.15		0.32	0.58	0.28
390	39						0.14				0.25
470	47				0.20					0.48	0.23
560	56										0.20
680	68										0.185
820	82										0.172
101	100								0.13		0.160
121	120										0.136
151	150										0.124
181	180										0.119
221	220										0.116

Tolerance Of Inductors

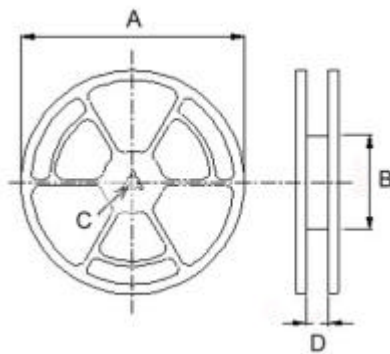
- PSD 2D09 1.2 ~ 10 μ H $\pm$ 30%
- PSD 2D11 1.5 ~ 10 μ H $\pm$ 30%
- PSD 2D14 1.5 ~ 12 μ H $\pm$ 30%
- PSD 2D18LD 2.2 ~ 47 μ H $\pm$ 30%
- PSD 2D18HP 1.7 ~ 15 μ H $\pm$ 30%
- Tolerance : M = $\pm$ 20% , T = $\pm$ 30% , N = $^{+40}_{-20}$ %
- PSD3D11 2.7 ~ 39 μ H $\pm$ 30%
- PSD3D11HP 0.6 ~ 22 μ H $\pm$ 30%
- PSD3D16 1.0 ~ 100 μ H $\pm$ 30%
- PSD3D28 3.3 ~ 47 μ H $\pm$ 30%
- PSD3D28LD 10 ~ 220 μ H $\pm$ 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	
PSD 2D09	3.35	3.35	1.4	1.55	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 2D11	3.35	3.35	1.4	1.55	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 2D14	3.5	3.5	1.7	1.55	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 2D18	3.5	3.5	2.1	1.55	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 3D11	4.2	4.2	1.5	1.55	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 3D16	4.1	4.1	2.0	1.5	1.75	12	8	4	2		178	60	13	13.2	1000
PSD 3D28	4.2	4.2	3.2	1.55	1.75	12	8	4	2		178	60	13	13.2	500