

SMD POWER INDUCTORS *General application*

Series PF *Shielded*



FEATURES

- ◆ This specification applies Ferrite Chip Inductance PF Series.

APPLICATION

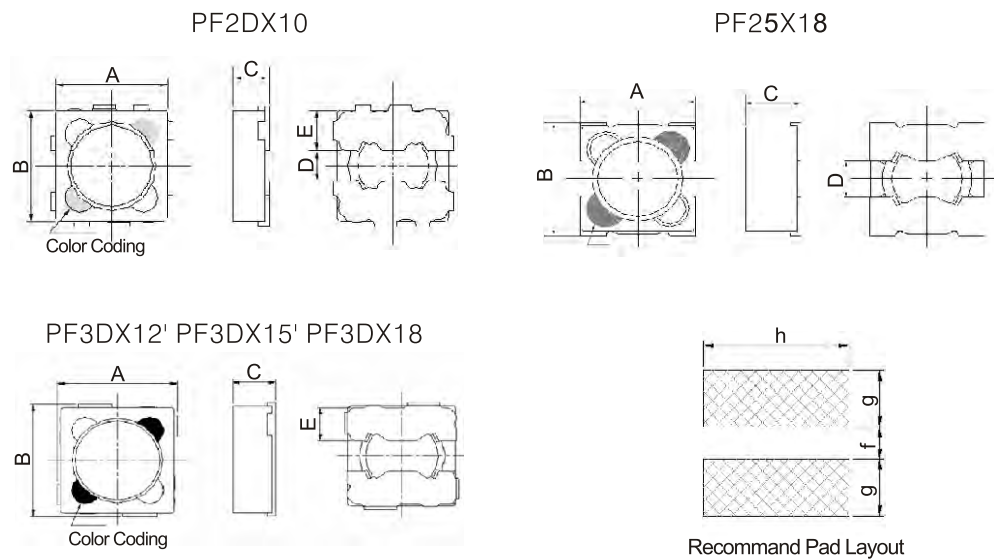
- ◆ Low profile/large current specifically suitable for Portable telephones, hard disk drives, PDA, DSC and other electronic equipments.

PRODUCT IDENTIFICATION

$\frac{PF}{a} \quad \frac{25}{b} \quad \frac{X}{c} \quad \frac{18}{d} \quad \frac{1}{e} \quad \frac{M}{f} \quad \frac{1U2}{g}$

- a : Type of products - SMD Power Inductors
 b : Dimension(mm) - 2D = 3.2 X 3.2 25 = 3.8 X 3.8 3D = 4.2 X 4.2
 c : Materials - General Application
 d : Height (mm) - 10 = 1.05 12 = 1.25 15 = 1.6 18 = 1.85
 e : Packing(PCS / Box) - 1 = 1,000
 f : Tolerance - M : $\pm 20\%$ 3 : $\pm 30\%$
 g : Inductance - 10U = 10 μ H, 220U = 220 μ H, 1M = 1000 μ H

SHAPES & DIMENSIONS



Type	A ± 0.2	B ± 0.2	C max.	D typ.	E typ.	f typ.	g typ.	h typ.
PF2DX10	3.2	3.2	1.05	1.1	0.8	0.8	1.4	3.6
PF3DX12	4.2	4.2	1.25	-	1.3	1.4	1.6	4.6
PF3DX15	4.2	4.2	1.60	-	1.3	1.4	1.6	4.6
PF3DX18	4.2	4.2	1.85	-	1.3	1.4	1.6	4.6

Unit : mm

SMD POWER INDUCTORS *Gernal application*

Series **PF** *Shielded*

ELECTRICAL CHARACTERISTICS

Part Number	Inductance L0 (μ H)	DCR (Ω) typ.	Idc (mA) L0▽ 10%	Idc (mA) L0▽ 35%	Irms (mA) TΔ 25°C	Color Coding
PF2DX101□1U2	1.2	0.070	1000	1400	1500	Black
PF2DX101□1U5	1.5	0.087	1000	1360	1400	Brown
PF2DX101□1U8	1.8	0.097	900	1240	1350	Red
PF2DX101□2U2	2.2	0.106	860	1080	1250	Orange
PF2DX101□2U7	2.7	0.127	760	940	1100	Yellow
PF2DX101□3U3	3.3	0.175	680	880	1000	Green
PF2DX101□3U9	3.9	0.200	620	840	900	Blue
PF2DX101□4U7	4.7	0.274	600	820	850	Violet
PF2DX101□5U6	5.6	0.319	540	720	750	Gray
PF2DX101□6U8	6.8	0.330	460	600	700	White
PF2DX101□8U2	8.2	0.420	440	580	650	Black
PF2DX101M10U	10	0.470	420	540	600	Brown
PF2DX101M12U	12	0.675	320	440	550	Red
PF2DX101M15U	15	0.800	300	400	500	Orange
PF2DX101M18U	18	0.890	300	380	450	Yellow
PF2DX101M22U	22	1.100	260	320	400	Green
PF2DX101M33U	33	1.600	220	280	340	Blue
PF2DX101M47U	47	2.430	180	220	240	Black

Test frequency : 1.0V/1KHz

L'IDC : Agilent / PH 4284A

RDC : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.

Operating temperature range : 25~+85°C

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance L0 (μH)	DCR (Ω) typ.	Idc (mA) L0▽ 10%	Idc (mA) L0▽ 35%	Irms (mA) TΔ 25°C	Color Coding
PF3DX121□1U	1	0.045	2300	3000	2000	Black
PF3DX121□1U2	1.2	0.048	2200	2800	1900	Brown
PF3DX121□1U5	1.5	0.055	1900	2400	1800	Red
PF3DX121□1U8	1.8	0.073	1800	2300	1750	Orange
PF3DX121□2U2	2.2	0.083	1700	2100	1750	Yellow
PF3DX121□2U7	2.7	0.109	1400	1700	1440	Green
PF3DX121□3U3	3.3	0.118	1300	1700	1400	Blue
PF3DX121□3U9	3.9	0.143	1260	1600	1300	Violet
PF3DX121□4U7	4.7	0.159	1240	1580	1200	Gray
PF3DX121□5U6	5.6	0.213	1000	1300	1000	White
PF3DX121□6U8	6.8	0.224	1000	1300	960	Black
PF3DX121□8U2	8.2	0.252	920	1140	940	Brown
PF3DX121M10U	10	0.327	860	1060	900	Red
PF3DX121M12U	12	0.363	800	980	820	Orange
PF3DX121M15U	15	0.516	600	800	640	Yellow
PF3DX121M18U	18	0.625	560	760	600	Green
PF3DX121M22U	22	0.732	460	640	520	Blue
PF3DX121M33U	33	1.165	420	500	420	Gray
PF3DX1513 500N	0.5	0.035	3100	3900	2500	Black
PF3DX151□1U	1	0.040	2300	3000	2400	Black
PF3DX151□1U2	1.2	0.043	2200	2800	2340	Brown
PF3DX151□1U5	1.5	0.050	2000	2600	2300	Red
PF3DX151□1U8	1.8	0.055	1660	2300	2100	Orange
PF3DX151□2U2	2.2	0.071	1600	2200	2000	Yellow
PF3DX151□2U7	2.7	0.078	1400	2000	1600	Green
PF3DX151□3U3	3.3	0.087	1340	2000	1600	Bluw
PF3DX151□3U9	3.9	0.100	1200	1800	1500	Voilet
PF3DX151□4U7	4.7	0.137	1140	1600	1400	Gray
PF3DX151□5U6	5.6	0.147	1060	1460	1200	White
PF3DX151□6U8	6.8	0.170	1000	1400	1150	Black
PF3DX151□8U2	8.2	0.195	940	1280	1100	Brown
PF3DX151M10U	10	0.228	900	1160	1020	Red
PF3DX151M12U	12	0.275	880	1080	900	Orange
PF3DX151M15U	15	0.340	640	860	720	Yellow
PF3DX151M18U	18	0.380	600	820	680	Green
PF3DX151M22U	22	0.495	540	740	650	Blue
PF3DX151M27U	27	0.735	500	700	550	Voilet
PF3DX151M33U	33	0.890	460	580	480	Gray
PF3DX151M39U	39	1.000	400	560	420	white
PF3DX151M47U	47	1.150	340	520	350	Black

L' IDC : Agilent / PH 4284A/1KHz with 1V.

RDC : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.

Idc for Inductance drop 10% or 35% from its value without current.

Irms for a 25°C rise above 25°C ambient.

Operating temperature range :25~+105°C

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ELECTRICAL CHARACTERISTICS

Part Number	Inductance L0 (μ H)	DCR (Ω) typ.	Idc (mA) L0▽ 10%	Idc (mA) L0▽ 35%	Irms (mA) TΔ 25°C	Color Coding
PF3DX181□1U	1	0.038	2600	3200	2400	Black
PF3DX181□1U2	1.2	0.044	2400	3000	2200	Brown
PF3DX181□1U5	1.5	0.050	2200	2700	2200	Red
PF3DX181□1U8	1.8	0.045	1900	2400	2000	Orange
PF3DX181□2U2	2.2	0.062	1800	2200	1900	Yellow
PF3DX181□2U7	2.7	0.068	1700	2100	1800	Green
PF3DX181□3U3	3.3	0.080	1500	1880	1650	Blue
PF3DX181□3U9	3.9	0.084	1400	1800	1560	Violet
PF3DX181□4U7	4.7	0.099	1220	1460	1400	Gray
PF3DX181□5U6	5.6	0.110	1160	1480	1300	White
PF3DX181□6U8	6.8	0.128	1020	1260	1200	Black
PF3DX181□8U2	8.2	0.146	1000	1240	1150	Brown
PF3DX181M10U	10	0.165	900	1100	1050	Red
PF3DX181M12U	12	0.254	840	1000	800	Orange
PF3DX181M15U	15	0.320	740	880	720	Yellow
PF3DX181M18U	18	0.360	700	840	680	Green
PF3DX181M22U	22	0.418	600	740	650	Blue
PF3DX181M27U	27	0.450	560	700	600	Violet
PF3DX181M33U	33	0.620	460	580	580	Gray
PF3DX181M39U	39	0.650	450	560	480	White
PF3DX181M47U	47	0.790	430	520	450	Black
PF3DX181M56U	56	0.862	380	480	400	Brown
PF3DX181M68U	68	1.000	300	400	360	Red
PF3DX181M100U	100	1.380	260	320	360	Yellow
PF3DX181M150U	150	2.410	180	240	320	Yellow
PF3DX181M1M	1000	15.200	80	100	130	Black
PF3DX181M1M5	1500	25.000	70	90	100	Black

L' IDC : Agilent / PH 4284A/1KHz with 1V.

RDC : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.

Idc for Inductance drop 10% or 35% from its value without current.

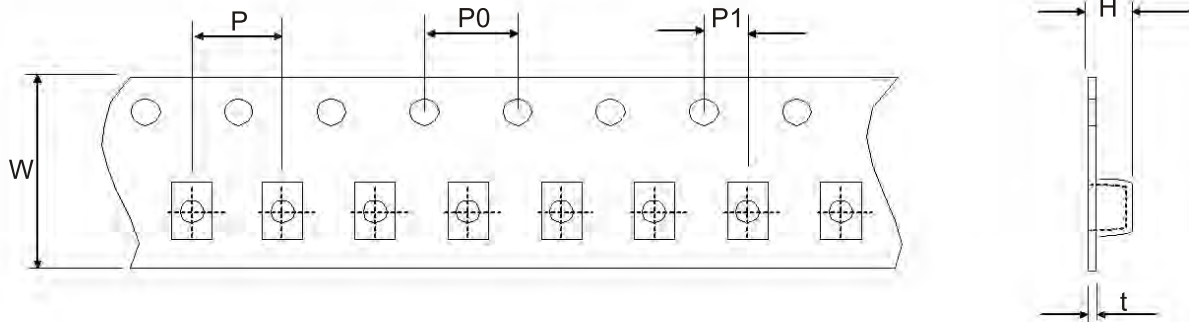
Irms for a 25°C rise above 25°C ambient.

Operating temperature range :25~+105°C

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Packaging

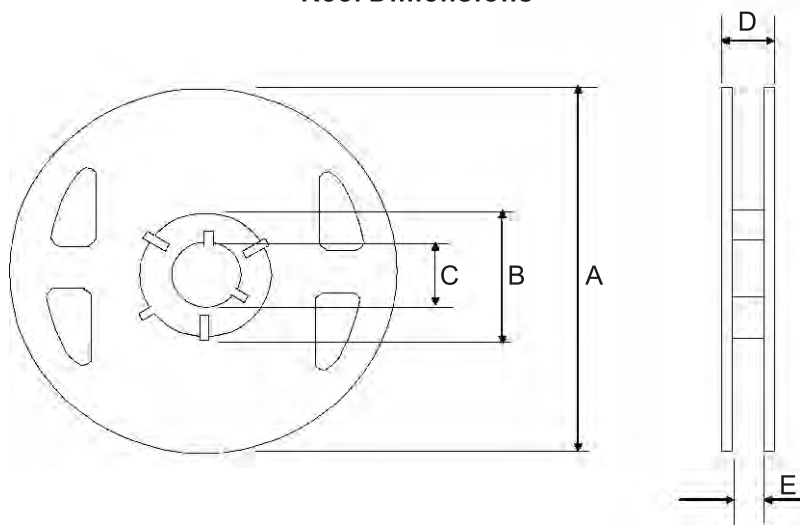
Tape Dimensions



Type	W	P	P0	P1	H	T
PF2DX10	12.0	8.0	4.00	2	1.3	0.23
PF25X18	12.0	8.0	4.00	2	2.1	0.23
PF3DX12	12.0	8.0	4.00	2	1.5	0.23
PF3DX15	12.0	8.0	4.00	2	1.8	0.23
PF3DX18	12.0	8.0	4.00	2	2.1	0.23

Dimension in mm

Reel Dimensions



Type	A	B	C	D	E
All Series	180.0	60.0	13.00	16	13.2

Dimension in mm