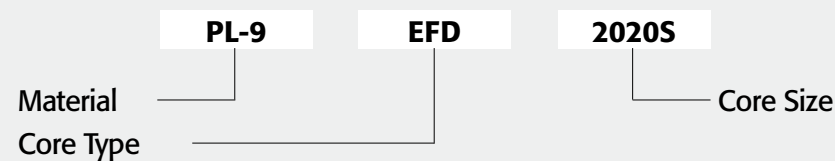


LOW PROFILE CORES

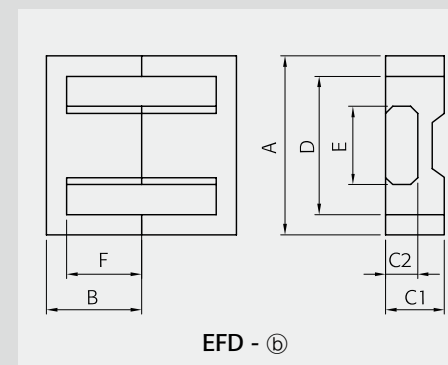
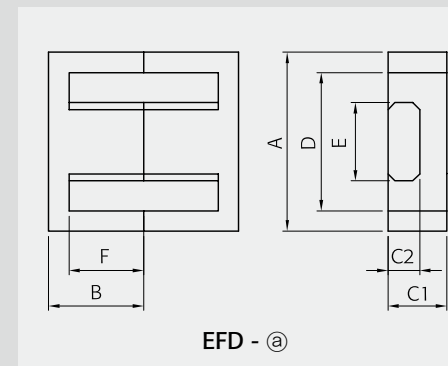
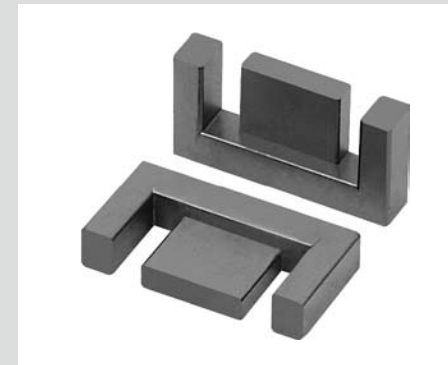
EFD13~EFD50

EPC13~EPC50

Ordering Code System



EFD CORES



Part No.		EFD1322N	EFD1515S	EFD1618S	EFD1715S
Type		EFD - (a)	EFD - (b)	EFD - (a)	EFD - (a)
Dimensions in mm	A	13.40 ±0.30	15.00 ±0.40	16.40 ±0.30	16.90 ±0.30
	B	11.20 ±0.15	7.50 ±0.15	9.00 ±0.20	7.60 ±0.20
	C1	4.50 ±0.15	7.50 ±0.15	4.50 ±0.15	5.50 ±0.20
	C2	3.00 ±0.10	2.40 ±0.10	2.35 ±0.10	2.90 ^{+0.05} _{-0.15}
	D	9.80 ±0.20	11.00 ±0.35	12.60 min.	12.80 min.
	E	5.30 ±0.15	5.30 ±0.15	6.70 ±0.15	7.30 ±0.15
	F	8.60 ±0.15	5.50 ±0.25	7.30 ±0.20	5.60 ±0.15

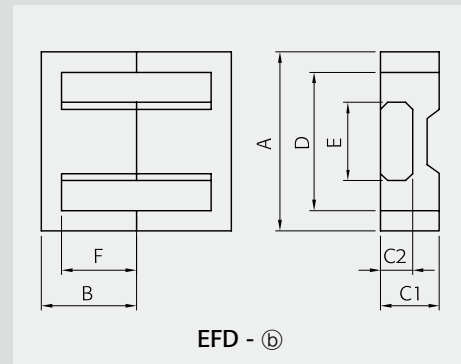
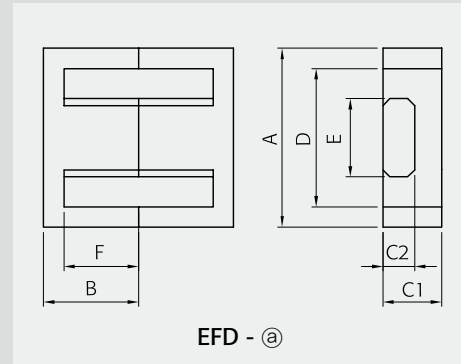
Core Set Parameters		EFD1322N	EFD1515S	EFD1618S	EFD1715S
C1(mm ¹)		2.687	2.270	2.400	1.740
Le(mm)		45.5	34.0	34.4	34.8
Ae(mm ²)		16.9	15.0	14.3	20.0
Ve(mm ³)		771	510	492	696
Ac(mm ²)		15.9	12.7	30.2	21.2
Aw(mm ²)		38.3	31.4	44.5	32.7
W(g/set)		4	2.7	3.0	3.9

Electrical Characteristics ⁽¹⁾⁽²⁾	AL value	PL-7	PL-9	PL-11	PL-13	PL-15
		AL value	810	890	840	1050
Core loss	AL value	PL-7	1000	1110	1100	1310
		PL-9	850	920	900	1200
		PL-11	1070	1180	1170	1400
		PL-13	850	920	900	1200
		PL-15	850	920	900	1200
	Core loss	PL-7	0.46	0.31	0.30	0.42
		PL-9	0.42	0.28	0.27	0.38
		PL-11	0.42	0.28	0.27	0.38
		PL-13	0.41	0.27	0.26	0.37
		PL-15	0.39	0.26	0.25	0.35

Note : 1) Core loss
 - Unit : Watt max.
 - Measuring conditions
 PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100°C
 PL-9, PL-13 : 100 kHz, 200mT, at 80°C

2) AL value
 - Unit : nH/N²
 - Measuring conditions : 1kHz, 0.1V, 23°C
 - Tolerance : ±25%

EFD CORES



Part No.	EFD1820S	EFD1822S	EFD2020S	EFD2023S	
Type	EFD - (a)	EFD - (a)	EFD - (b)	EFD - (b)	
Dimensions in mm	A	17.70 ±0.30	17.70 ±0.30	20.00 ±0.55	20.00 ±0.55
	B	10.10 ±0.20	10.90 ±0.20	10.00 ±0.15	11.50 ±0.15
	C1	5.60 ±0.15	5.60 ±0.15	6.65 ±0.15	6.65 ±0.15
	C2	3.40 ±0.10	3.40 ±0.10	3.60 ±0.15	3.60 ±0.15
	D	13.10 min.	13.10 min.	15.40 ±0.50	15.40 ±0.50
	E	7.50 ±0.15	7.50 ±0.15	8.90 ±0.20	8.90 ±0.20
	F	7.80 ±0.20	8.60 ±0.20	7.70 ±0.20	9.20 ±0.20

Core Set Parameters	EFD1820S	EFD1822S	EFD2020S	EFD2023S
C1(mm ⁻¹)	2.020	2.140	1.520	1.710
Le(mm)	51.6	54.8	47.0	53.0
Ae(mm ²)	25.6	25.6	31.0	31.0
Ve(mm ³)	1320	1402	1460	1643
Ac(mm ²)	25.5	25.5	32.0	32.0
Aw(mm ²)	46.0	53.6	50.0	60.5
W(g/set)	5.6	6.4	7.2	7.9

Electrical Characteristics ⁽¹⁾⁽²⁾	AL value	EFD1820S	EFD1822S	EFD2020S	EFD2023S
		PL-7	1050	990	1370
	PL-9	1310	1250	1710	1550
	PL-11	1100	1030	1400	1300
	PL-13	1400	1330	1820	1650
	PL-15	1100	1030	1400	1300
Core loss	PL-7	0.79	0.84	0.88	0.99
	PL-9	0.73	0.77	0.80	0.90
	PL-11	0.73	0.77	0.80	0.90
	PL-13	0.70	0.74	0.77	0.87
	PL-15	0.66	0.70	0.73	0.82

Note : 1) Core loss
 - Unit : Watt max.
 - Measuring conditions
 PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100°C
 PL-9, PL-13 : 100 kHz, 200mT, at 80°C

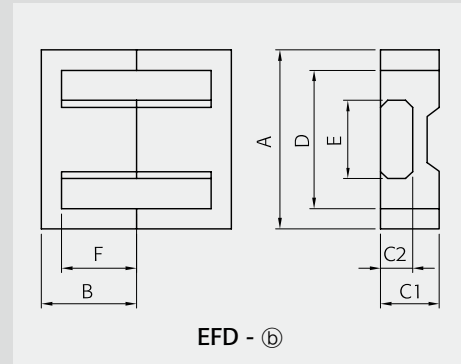
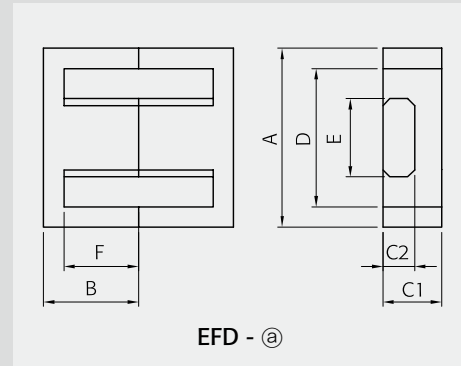
2) AL value
 - Unit : nH/N²
 - Measuring conditions : 1kHz, 0.1V, 23°C
 - Tolerance: ±25%

	EFD2025N	EFD2025S	EFD2027S	EFD2120S	EFD2124N	EFD2125S	EFD2126N	EFD2520S	EFD2525S	
Type	EFD - (a)	EFD - (a)	EFD - (a)	EFD - (b)	EFD - (a)	EFD - (b)	EFD - (a)	EFD - (b)	EFD - (b)	
Dimensions in mm	A	20.30 ±0.35	20.00 ±0.55	20.30 ±0.35	20.50 ±0.55	21.20 ±0.40	20.50 ±0.35	21.20 ±0.40	25.40 ±0.40	25.00 ±0.65
	B	12.75 ±0.25	12.50 ±0.20	13.50 ±0.25	10.00 ±0.15	11.80 ±0.20	12.75 ±0.20	13.10 ±0.20	10.50 ±0.20	12.50 ±0.15
	C1	6.65 ^{+0.20} / _{-0.15}	6.65 ±0.15	5.60 ^{+0.20} / _{-0.15}	6.65 ±0.15	5.90 ±0.15	6.65 ±0.15	5.90 ±0.15	11.00 ±0.20	9.10 ±0.20
	C2	3.60 ^{+0.20} / _{-0.15}	3.60 ±0.15	3.40 ^{+0.20} / _{-0.15}	3.60 ±0.15	3.30 ±0.10	3.60 ±0.15	3.30 ±0.10	6.60 ±0.15	5.20 ±0.15
	D	15.70 ±0.30	15.40 ±0.50	14.30 ±0.30	15.90 ±0.30	15.80 min.	15.90 ^{+0.30} / _{-0.25}	15.80 min.	19.00 ±0.40	18.70 ±0.60
	E	8.90 ±0.20	8.90 ±0.20	8.90 ±0.20	8.90 ±0.15	9.40 ±0.20	8.90 ±0.15	9.40 ^{+0.15} / _{-0.25}	6.60 ±0.15	11.40 ±0.20
	F	10.45 ±0.20	10.20 ±0.20	10.45 ±0.20	7.70 ±0.20	9.10 ±0.20	10.45 ±0.20	10.40 ±0.20	7.00 ±0.15	9.30 ±0.25

Core Set Parameters	EFD2025N	EFD2025S	EFD2027S	EFD2120S	EFD2124N	EFD2125S	EFD2126N	EFD2520S	EFD2525S
C1(mm ⁻¹)	1.940	1.840	1.864	1.516	1.696	1.938	1.863	0.948	0.980
Le(mm)	59.7	57.0	61.5	47	53.1	59.7	58.3	54.8	57.0
Ae(mm ²)	30.8	31.0	33.0	31	31.3	30.8	31.3	57.8	58.0
Ve(mm ³)	1840	1767	2030	1457	1660	1840	1825	3163	3300
Ac(mm ²)	14.4	32.0	30.3	32	31	32	31	43.6	60.0
Aw(mm ²)	33.8	66.3	56.4	53.9	61.9	73.2	66.6	86.8	70.0
W(g/set)	9.0	8.5	9.5	7.4	8.4	8.8	9.2	15	17.1

Electrical Characteristics ⁽¹⁾⁽²⁾	AL value	EFD2025N	EFD2025S	EFD2027S	EFD2120S	EFD2124N	EFD2125S	EFD2126N	EFD2520S	EFD2525S
		PL-7	1100	1150	1130	1370	1200	1100	1200	2200
	PL-9	1360	1450	1400	1700	1500	1400	1500	2800	2800
	PL-11	1100	1200	1200	1400	1300	1100	1300	2300	2300
	PL-13	1450	1550	1490	1800	1600	1500	1600	3000	2980
	PL-15	1100	1200	1200	1400	1300	1100	1300	2300	2300
Core loss	PL-7	1.10	1.06	1.22	0.9	1.00	1.10	1.10	1.90	1.98
	PL-9	1.01	0.97	1.12	0.80	0.91	1.01	1.00	1.74	1.82
	PL-11	1.01	0.97	1.12	0.80	0.91	1.01	1.00	1.74	1.82
	PL-13	0.98	0.94	1.08	0.77	0.88	0.98	0.97	1.68	1.75
	PL-15	0.92	0.88	1.02	0.73	0.83	0.92	0.91	1.58	1.65

EFD CORES



Part No.	EFD2525V	EFD2625S	EFD3030N	EFD3030S	
Type	EFD - (a)	EFD - (b)	EFD - (b)	EFD - (b)	
Dimensions in mm	A	25.05 ±0.75	26.00 ±0.55	30.90 ±0.80	30.00 ±0.80
	B	12.60 ±0.20	12.60 ±0.15	15.30 ±0.20	15.00 ±0.15
	C1	12.45 ±0.25	9.10 ±0.20	9.10 ±0.20	9.10 ±0.25
	C2	8.30 ±0.30	5.20 ±0.15	4.90 ±0.15	4.90 ±0.15
	D	19.20 ±0.40	19.40 ±0.50	23.30 ±0.50	22.40 ±0.75
	E	8.80 ±0.25	11.40 ±0.20	14.60 ±0.25	14.60 ±0.25
	F	9.55 ±0.25	9.30 ±0.25	11.50 ±0.30	11.20 ±0.30

Core Set Parameters		EFD2525V	EFD2625S	EFD3030N	EFD3030S
C1(mm ⁻¹)		0.810	0.973	1.003	0.990
Le(mm)		60.0	58.4	69.4	68.0
Ae(mm ²)		73.0	60.0	69.2	69.0
Ve(mm ³)		4300	3500	4800	4700
Ac(mm ²)		73.0	59.0	71.5	71.0
Aw(mm ²)		91.7	74.4	100.1	87.4
W(g/set)		21	17	24.3	22.1

Electrical Characteristics ⁽¹⁾⁽²⁾		AL value	EFD2525V	EFD2625S	EFD3030N	EFD3030S
			Core loss	PL-7	2700	2300
	PL-9	3350	2870	2900	2500	
	PL-11	2800	2400	2400	2000	
	PL-13	3570	3060	3100	2670	
	PL-15	2800	2400	2400	2000	
	PL-7	2.60	2.10	2.88	2.82	
	PL-9	2.40	1.93	2.64	2.59	
	PL-11	2.40	1.93	2.64	2.59	
	PL-13	2.40	1.86	2.54	2.49	
	PL-15	2.20	1.75	2.40	2.35	

Note : 1) Core loss

- Unit : Watt max.
- Measuring conditions
- PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100°C
- PL-9, PL-13 : 100 kHz, 200mT, at 80°C

2) AL value

- Unit : nH/N²
- Measuring conditions : 1kHz, 0.1V, 23°C
- Tolerance : ±25%

	EFD3032S	EFD3033V	EFD3130D	EFD3130S	EFD3133V	EFD4351S	EFD4549S	EFD5050S
Type	EFD - (b)	EFD - (b)	EFD - (b)	EFD - (b)	EFD - (b)	EFD - (a)	EFD - (a)	EFD - (a)
A	30.00 ±0.80	29.70 ±0.80	30.90 ±0.80	30.90 ±0.80	31.70 ±0.60	43.00 ^{+0.40} _{-0.50}	45.20 ±0.50	50.00 ±0.50
B	16.00 ±0.15	16.40 ±0.30	15.00 ±0.20	15.00 ±0.20	16.80 ±0.30	26.30 ±0.15	24.50 ±0.20	25.00 ±0.30
C1	9.10 ±0.20	12.50 ±0.40	9.10 ±0.20	9.10 ±0.25	12.50 ±0.40	6.70 ±0.15	5.90 ±0.25	10.00 ±0.30
C2	4.90 ±0.15	8.20 ±0.30	4.90 ±0.15	4.90 ±0.15	8.20 ±0.30	4.40 ±0.15	3.00 ±0.20	6.00 ±0.20
D	22.40 ±0.75	22.10 ±0.50	23.90 ±0.50	23.30 ±0.50	24.10 ±0.50	28.10 ±0.50	33.30 ±0.50	35.00 min.
E	14.60 ±0.25	11.60 ±0.30	14.60 ±0.25	14.60 ±0.25	11.60 ±0.30	21.60 ±0.30	24.00 ±0.30	23.00 ±0.30
F	12.20 ±0.30	11.90 ±0.30	11.20 ±0.30	11.20 ±0.30	12.30 ±0.30	18.50 ±0.15	17.80 ±0.20	17.00 ±0.30

Core Set Parameters		EFD3032S	EFD3033V	EFD3130D	EFD3130S	EFD3133V	EFD4351S	EFD4549S	EFD5050S
C1(mm ⁻¹)		1.043	0.750	0.987	0.990	0.768	1.101	1.447	0.680
Le(mm)		72	73.0	68.2	68.2	76	107.3	105	103.3
Ae(mm ²)		69	97.0	69.1	69.1	98.9	97.5	72.6	151.5
Ve(mm ³)		4968	7100	4710	4712	7516	10460	7620	15463
Ac(mm ²)		71.5	95.0	71.5	71.5	95.1	95	72	138.0
Aw(mm ²)		95.2	125.0	104.2	97.4	153.8	120.3	165.5	221.0
W(g/set)		25.2	36.6	24	24.3	24.5	55	40.7	90

Electrical Characteristics ⁽¹⁾⁽²⁾		AL value	EFD3032S	EFD3033V	EFD3130D	EFD3130S	EFD3133V	EFD4351S	EFD4549S	EFD5050S
			Core loss	PL-7	1900	3020	1800	1800	2500	2080
	PL-9	2400	3775	2300	2400	3100	2600	1370	3900	
	PL-11	2000	3100	1900	1900	2600	2150	1150	3200	
	PL-13	2600	4020	2500	2560	3300	2770	1470	4160	
	PL-15	2000	3100	1900	1900	2600	2150	1150	3200	
	PL-7	2.98	4.26	2.83	2.83	4.50	6.28	4.57	10.00	
	PL-9	2.73	3.91	2.59	2.59	4.10	5.75	4.19	8.00	
	PL-11	2.73	3.91	2.59	2.59	4.10	5.75	4.19	8.00	
	PL-13	2.63	3.76	2.50	2.50	4.05	5.54	4.04	7.80	
	PL-15	2.48	3.55	2.36	2.36	3.90	5.23	3.81	7.60	