



SMD Wire Wound Ferrite Chip Inductors - HFW Series

FEATURES

- * RoHS compliant
- * Very strong solderability by reflow soldering and soldering iron
- * Highly accurate dimensions
- * Can be mounted automatically
- * Terminals are highly resistant to external forces
- * Highly resistant to mechanical shocks and pressure
- * Highly reliable in environments of sudden temperature change and humidity
- * Low DCR & better Q value in ferrite series

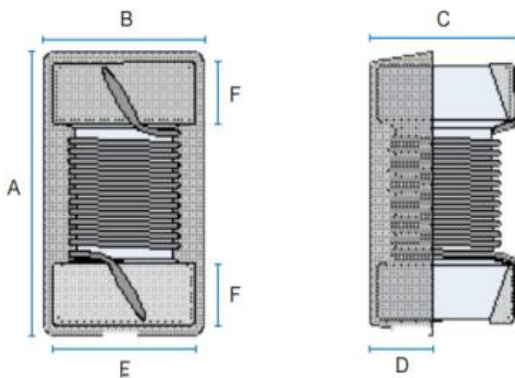


ORDERING CODE(标志示例)

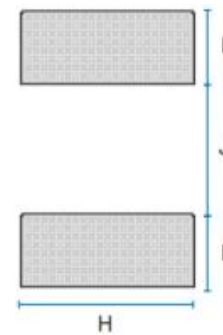
HFW □□□□ - □□□ □
(1) (2) (3) (4)

- (1) HFW 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A Max	B Max	C Max	D Typ.	E Typ.	F Typ.	H Typ.	I Typ.	J Typ.
HFW0402	1.19	0.70	0.64	0.25	0.54	0.23	0.66	0.36	0.46
HFW1008	2.92	2.70	2.23	0.70	1.52	0.51	2.54	1.02	1.27
HFW1210	3.50	2.90	2.60	1.20	2.03	0.51	2.54	1.02	1.78
HFW1812	4.95	3.85	3.43	1.78	2.54	0.64	3.05	1.14	3.00



SMD Wire Wound Ferrite Chip Inductors - HFWC Series

FEATURES

- * RoHS compliant
- * SMD type wire-wound chip inductor with low DC resistance
- * Highly accurate dimensions
- * Terminals are highly resistant to external forces
- * Highly resistant to mechanical shocks and pressure
- * Low DCR & better Q value in ferrite series



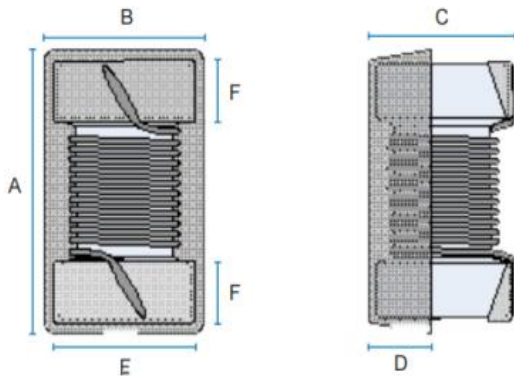
ORDERING CODE(标志示例)

HFWC □□□□ - □□□ □

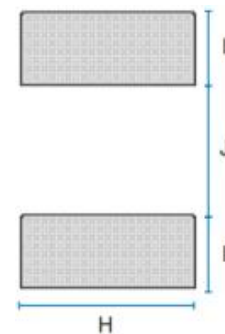
(1) (2) (3) (4)

- (1) HFWC 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A Max	B Max	C Max	D Typ.	E Typ.	F Typ.	H Typ.	I Typ.	J Typ.
HFWC0603	1.80	1.25	1.10	0.51	0.76	0.33	1.02	0.64	0.64
HFWC0805	2.40	1.73	1.52	0.71	1.27	0.51	1.78	1.02	0.76



SMD Wire Wound Ferrite Chip Inductors - HFW0402 Series

HFW0402 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	SRF (MHz)Min	RDC (Ω)Max	Isat (mA) Max	Tolerance (\pm %)
HFW0402-R10□	0.10	7.9	1400	0.16	900	K,M
HFW0402-R15□	0.15	7.9	1220	0.26	630	K,M
HFW0402-R18□	0.18	7.9	1150	0.28	560	K,M
HFW0402-R20□	0.20	7.9	1000	0.44	400	K,M
HFW0402-R22□	0.22	7.9	1150	0.53	380	K,M
HFW0402-R25□	0.25	7.9	900	0.90	360	K,M
HFW0402-R27□	0.27	7.9	860	0.90	360	K,M
HFW0402-R30□	0.30	7.9	860	0.90	360	K,M
HFW0402-R33□	0.33	7.9	820	0.56	350	K,M
HFW0402-R36□	0.36	7.9	810	0.90	250	K,M
HFW0402-R39□	0.39	7.9	760	1.00	200	K,M
HFW0402-R47□	0.47	7.9	650	1.00	200	K,M
HFW0402-R56□	0.56	7.9	600	1.20	200	K,M
HFW0402-R68□	0.68	7.9	290	1.60	100	K,M
HFW0402-R82□	0.82	7.9	385	5.85	90	K,M
HFW0402-1R0□	1.0	7.9	200	6.50	50	J,K,M
HFW0402-2R2□	2.2	7.9	100	2.30	40	J,K,M
HFW0402-4R7□	4.7	7.9	50Typ	4.80	10	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Saturation DC current: Inductance drop approximately 30% of L0 Isat
- Storage temp.: -10°C ~ +40°C R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.



SMD Wire Wound Ferrite Chip Inductors - HFW1008 Series

HFW1008 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (TYP)	SRF (MHz)Min	RDC (Ω)Max	Isat (mA) Max	Tolerance (\pm %)
HFW1008-R39□	0.39	7.9	12	400	0.40	500	K,M
HFW1008-R47□	0.47	25	12	600	0.27	700	K,M
HFW1008-R56□	0.56	7.9	12	230	0.62	700	K,M
HFW1008-R68□	0.68	7.9	12	230	0.62	700	K,M
HFW1008-R82□	0.82	7.9	12	230	0.62	700	K,M
HFW1008-R90□	0.90	7.9	20	300	0.35	1400	K,M
HFW1008-1R0□	1	7.9	18	230	0.62	700	K,M
HFW1008-1R2□	1.2	7.9	18	210	0.68	650	K,M
HFW1008-1R5□	1.5	7.9	18	190	0.76	630	K,M
HFW1008-1R8□	1.8	7.9	18	170	0.84	600	K,M
HFW1008-2R0□	2	7.9	18	160	1.10	550	K,M
HFW1008-2R2□	2.2	7.9	18	150	1.10	520	K,M
HFW1008-2R7□	2.7	7.9	18	135	1.28	490	K,M
HFW1008-3R3□	3.3	7.9	18	120	1.46	450	K,M
HFW1008-3R9□	3.9	7.9	18	105	2.30	300	K,M
HFW1008-4R7□	4.7	7.9	18	90	2.00	400	K,M
HFW1008-5R6□	5.6	7.9	15	80	1.80	380	K,M
HFW1008-6R8□	6.8	7.9	15	70	2.00	360	K,M
HFW1008-8R2□	8.2	7.9	15	65	2.65	330	K,M
HFW1008-100□	10	2.5	12	60	2.95	300	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Saturation DC current: Inductance drop approximately 30% of L0 Isat
- Storage temp.: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.



SMD Wire Wound Ferrite Chip Inductors - HFW1008 Series

HFW1008 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (TYP)	SRF (MHz)Min	RDC (Ω)Max	Isat (mA) Max	Tolerance (\pm %)
HFW1008-150□	15	2.5	12	30	3.70	280	J,K,M
HFW1008-180□	18	2.5	12	26	4.00	160	J,K,M
HFW1008-220□	22	2.5	12	22	6.14	270	J,K,M
HFW1008-330□	33	2.5	10	12	7.00	200	J,K,M
HFW1008-390□	39	2.5	10	16	10.00	180	J,K,M
HFW1008-470□	47	2.5	10	10	10.70	160	J,K,M
HFW1008-560□	56	2.5	10	8	12.00	170	J,K,M
HFW1008-680□	68	2.5	10	6	13.50	145	J,K,M
HFW1008-820□	82	2.5	8	6	20.00	100	J,K,M
HFW1008-101□	100	1	8	4	21.00	80	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Saturation DC current: Inductance drop approximately 30% of L0 Isat
- Storage temp.: -10°C ~ +40°C R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)



SMD Wire Wound Ferrite Chip Inductors - HFW1210 Series

HFW1210 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (Min)	SRF (MHz)Min	RDC (Ω)Max	Isat (mA) Max	Tolerance (\pm %)
HFW1210-R56□	0.56	25	20	180	0.55	450	K,M
HFW1210-R82□	0.82	7.9	20	200	0.40	450	K,M
HFW1210-1R0□	1	7.9	20	200	0.40	450	K,M
HFW1210-1R2□	1.2	7.9	20	200	0.40	450	K,M
HFW1210-1R5□	1.5	7.9	20	200	0.40	450	K,M
HFW1210-1R8□	1.8	7.9	20	195	0.80	450	K,M
HFW1210-2R2□	2.2	7.9	30	175	0.80	450	K,M
HFW1210-3R3□	3.3	7.9	20	150	1.20	400	K,M
HFW1210-4R7□	4.7	7.9	18	60	1.30	350	K,M
HFW1210-5R6□	5.6	7.9	18	50	2.00	320	K,M
HFW1210-6R8□	6.8	7.9	18	35	1.50	310	K,M
HFW1210-8R2□	8.2	7.9	15	33	1.60	305	K,M
HFW1210-10□	10	2.5	15	30	1.00	300	J,K,M
HFW1210-12□	12	2.5	15	25	1.80	300	J,K,M
HFW1210-15□	15	2.5	15	22	2.00	225	J,K,M
HFW1210-18□	18	2.5	15	22	2.05	215	J,K,M
HFW1210-22□	22	2.5	15	20	2.40	210	J,K,M
HFW1210-27□	27	2.5	15	20	2.80	160	J,K,M
HFW1210-33□	33	2.5	15	15	2.90	160	J,K,M
HFW1210-47□	47	2.5	15	10	5.20	140	J,K,M
HFW1210-56□	56	2.5	8	8	5.6	125	J,K,M
HFW1210-68□	68	1	6	10	13	100	J,K,M
HFW1210-82□	82	1	6	10	13	100	J,K,M
HFW1210-101□	100	1	6	10	13	100	J,K,M
HFW1210-221□	220	1	8	2.6	30	65	J,K,M
HFW1210-331□	330	1	8	2.3	35	55	J,K,M
HFW1210-471□	470	1	8	2	42	40	J,K,M
HFW1210-561□	560	1	8	3	60	10	J,K,M
HFW1210-621□	620	1	8	2	85	10	J,K,M
HFW1210-681□	680	1	6	2	90	10	J,K,M
HFW1210-102□	1000	1	6	1	130	30	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Saturation DC current: Inductance drop approximately 30% of L0 Isat
- Storage temp.: -10°C ~ +40°C R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.



SMD Wire Wound Ferrite Chip Inductors - HFW1812 Series

HFW1812 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (Min)	SRF (MHz)Min	RDC (Ω)Max	Irms (mA) Max	Tolerance (\pm %)
HFW1812-1R0□	1	7.9	25	250	0.45	600	K,M
HFW1812-2R2□	2.2	7.9	25	200	0.50	600	K,M
HFW1812-4R7□	4.7	7.9	25	100	0.60	600	K,M
HFW1812-6R8□	6.8	7.9	25	80	0.80	600	K,M
HFW1812-100□	10	2.5	20	50	1.10	490	K,M
HFW1812-120□	12	2.5	20	55	1.10	490	K,M
HFW1812-150□	15	2.5	18	35	1.20	450	K,M
HFW1812-180□	18	2.5	18	29	1.20	430	K,M
HFW1812-220□	22	2.5	18	20	1.30	400	K,M
HFW1812-330□	30	2.5	18	18	1.70	350	K,M
HFW1812-470□	47	2.5	42(Typ)	24	5.00	200	K,M
HFW1812-101□	100	1	15	3	5.90	130	J,K,M
HFW1812-181□	180	1	8@ 7.9MHz	3	30.00	50	J,K,M
HFW1812-221□	220	1	18@ 2.5MHz	5	15.00	100	J,K,M
HFW1812-561□	560	1	10@ 7.9MHz	2	12.50	110	J,K,M
HFW1812-681□	680	1	8@ 7.9MHz	3	4.50	200	J,K,M
HFW1812-102□	1000	1	10@ 1MHz	1	20.00	50	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: J= \pm 5% , K= \pm 10% , M= \pm 20%

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise(Δ T) is 40°C approximately at Irms
- Storage temp.: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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**SMD Wire Wound Ferrite Chip Inductors - HFWC0603 Series****HFWC0603 series Electrical Characteristics**

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (Typ)	SRF (MHz)Typ	RDC (Ω)Max	I _{rms} (mA) Max	Tolerance (\pm %)	Color
HFWC0603-1R0□	1.0	7.9	16	250	0.41	700	K,M	/
HFWC0603-1R5□	1.5	7.9	16	160	0.52	600	K,M	Brown
HFWC0603-1R8□	1.8	7.9	16	121	0.56	580	K,M	Red
HFWC0603-2R2□	2.2	7.9	16	103	0.72	580	K,M	Orange
HFWC0603-2R7□	2.7	7.9	16	72	0.81	500	K,M	Yellow
HFWC0603-3R3□	3.3	7.9	16	66	0.91	500	K,M	Green
HFWC0603-3R9□	3.9	7.9	16	61	1.08	460	K,M	Blue
HFWC0603-4R7□	4.7	7.9	16	51	0.97	420	K,M	Violet
HFWC0603-5R6□	5.6	7.9	16	47	1.43	380	K,M	Gray
HFWC0603-6R8□	6.8	7.9	16	43	1.95	340	K,M	White
HFWC0603-8R2□	8.2	7.9	16	40	2.18	300	K,M	/
HFWC0603-100□	10	2.5	14	36	2.40	280	J,K,M	Brown
HFWC0603-120□	12	2.5	14	32	2.96	260	J,K,M	Red
HFWC0603-150□	15	2.5	14	29	3.38	220	J,K,M	Orange
HFWC0603-180□	18	2.5	14	28	3.77	220	J,K,M	Yellow
HFWC0603-220□	22	2.5	14	24	4.69	200	J,K,M	Green
HFWC0603-270□	27	2.5	14	20	6.76	140	J,K,M	Blue
HFWC0603-330□	33	2.5	14	15	8.58	120	J,K,M	Violet
HFWC0603-470□	47	2.5	14	5	12.00	100	J,K,M	/

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Rating DC current: Temperature rise(Δ T) is 40°C approximately at I_{rms}
- Operating temp.: -40°C~ +85°C
- .Storage temp.: -10°C ~ +40°C R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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SMD Wire Wound Ferrite Chip Inductors - HFWC0805 Series

HFWC0805 series Electrical Characteristics

Part No.	Inductance (μ H)	Test Freq. (MHz)	Q (Typ)	SRF (MHz)Typ	RDC (Ω)Max	I _{rms} (mA) Max	Tolerance (\pm %)	Color
HFWC0805-R68□	0.68	7.9	14	765	0.19	1200	K,M	Gray
HFWC0805-1R0□	1.0	7.9	14	208	0.17	1100	K,M	/
HFWC0805-1R2□	1.2	7.9	14	208	0.17	960	K,M	Red
HFWC0805-1R5□	1.5	7.9	14	130	0.22	880	K,M	Brown
HFWC0805-1R8□	1.8	7.9	14	112	0.26	860	K,M	Orange
HFWC0805-2R2□	2.2	7.9	12	80	0.31	740	K,M	Red
HFWC0805-3R3□	3.3	7.9	12	50	0.36	620	K,M	Orange
HFWC0805-4R7□	4.7	7.9	14	51	0.56	520	K,M	Yellow
HFWC0805-5R6□	5.6	7.9	12	42	0.65	480	K,M	Blue
HFWC0805-6R8□	6.8	7.9	14	35	0.88	420	K,M	Green
HFWC0805-8R2□	8.2	7.9	13	33	0.94	400	K,M	Violet
HFWC0805-100□	10	2.5	14	25	1.17	300	J,K,M	Blue
HFWC0805-120□	12	2.5	14	30	1.50	290	J,K,M	Gray
HFWC0805-150□	15	2.5	15	28	1.82	280	J,K,M	Violet
HFWC0805-180□	18	2.5	15	27	2.01	260	J,K,M	White
HFWC0805-220□	22	2.5	15	20	2.29	240	J,K,M	Gray
HFWC0805-470□	47	2.5	14	15	4.42	160	J,K,M	/
HFWC0805-560□	56	2.5	14	10	5.75	150	J,K,M	Yellow
HFWC0805-680□	68	2.5	14	10	5.90	140	J,K,M	Brown
HFWC0805-820□	82	2.5	14	10	9.75	100	J,K,M	Orange
HFWC0805-101□	100	1.0	10	5	9.75	100	J,K,M	Red

Note: When ordering, please specify tolerance code. Tolerance: J=±5% , K=±10% , M=±20%

- Rating DC current: Temperature rise(Δ T) is 40°C approximately at I_{rms}
- Operating temp.: -40°C~ +85°C
- .Storage temp.: -10°C ~ +40°C R.H.: 65% Max
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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SMD Wire Wound Ferrite Chip Inductors - HFW Series

Packaging Specifications

Figure 1

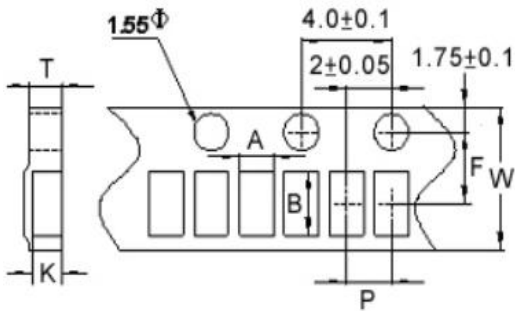
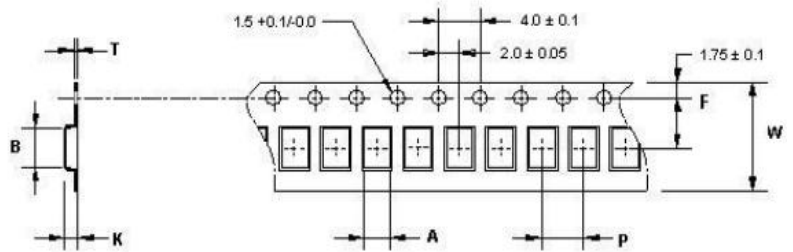
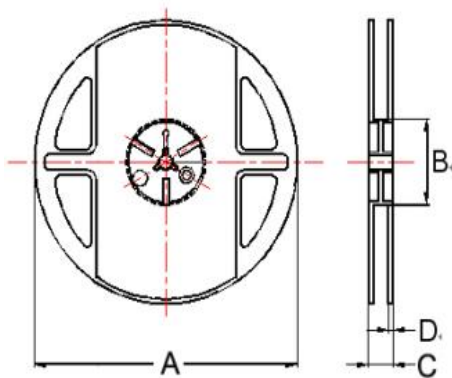


Figure 2



Reel Dimensions



Dimensions in mm

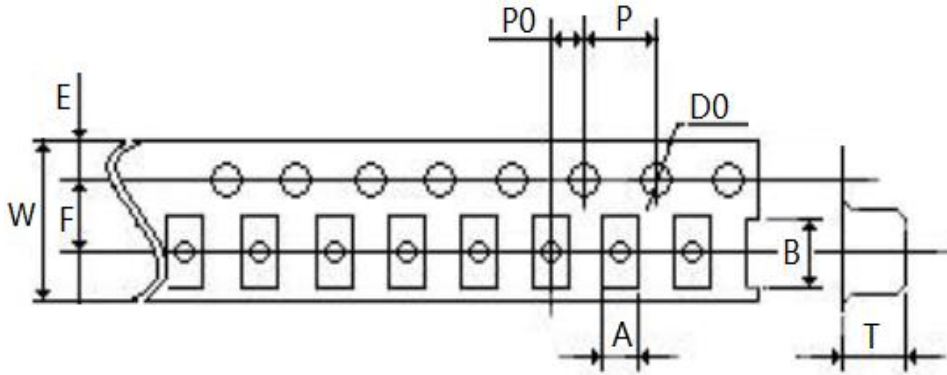
TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS/REEL
		A	B	T	W	P	F	K	A	B	C	D	
HFW0402	1	0.74	1.23	0.75	8	4	3.5	0.59	178	60	12	2.0	10000
HFW1008	2	2.73	2.93	0.26	8	4	3.5	2.34	178	60	12	2.0	2000
HFW1210	2	2.96	3.60	0.26	8	4	3.5	2.40	178	60	12	2.0	2000
HFW1812	2	3.90	4.90	0.30	12	8	5.5	3.20	178	60	16	1.4	500



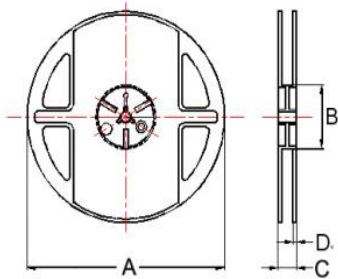
SMD Wire Wound Ferrite Chip Inductors - HFWC Series

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions									Reel Dimensions				Quantity PCS/REEL
	W	A	B	T	P	P0	D0	E	F	A	B	C	D	
HFWC0603	8	1.15	1.83	0.95	4	2	1.5	1.75	3.5	178	60	12	2.0	4000
HFWC0805	8	1.85	2.4	1.45	4	2	1.5	1.75	3.50	178	60	12	2.0	2000