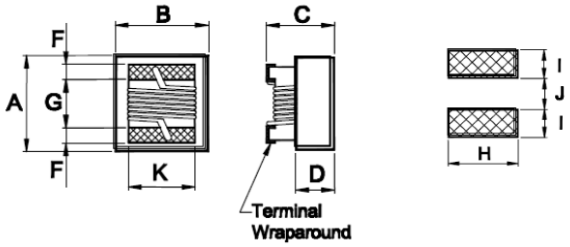
Features:

- Wirewound on ferrite core design
- Shows high reliability under mechanical and environmental stress
- Robust termination for outstanding mechanical strength
- Exceptional Q values for small package sizes
- High current option available
- RoHS compliant, REACH compliant, lead free, halogen free
- Contact Stackpole for additional inductance values

Inductance and Current Ranges

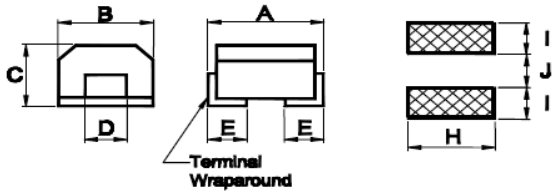
Type	Inductance (µH)	Current Range (mA)
LWF0603	1 ~ 33	860 ~ 120
LWF0603…-HC	0.047 ~ 10	1800 ~ 370
LWF0805	0.11 ~ 39	1700 ~ 100
LWF0805…-HC	0.47 ~ 100	1400 ~ 100
LWF1008	0.12 ~ 100	1000 ~ 200
LWF1210	0.18 ~ 150	450 ~ 65
LWF1210…-HC	1 ~ 100	770 ~ 75
LWF1812	0.18 ~ 820	700 ~ 30
LWF1812…-HC	1 ~ 680	1050 ~ 65
LWF2220	1.2 ~ 10	75 ~ 25
LWF2220…-HC	1 ~ 1000	1800 ~ 85

Mechanical Specifications - 0603, 0805, 1008



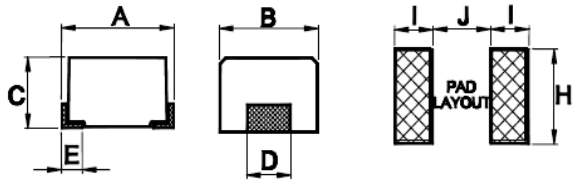
Type/Code	Typical Unit Weight (mg)	A	B	C	D (Ref.)	F	G (Ref.)	H	I	J	K	Unit
LWF0603	9.6	0.071 max 1.80 max	0.047 max 1.20 max	0.039 max 1.00 max	0.018 0.45	0.013 ± 0.004 0.33 ± 0.10	0.033 0.85	0.040 1.02	0.025 0.64	0.025 0.64	0.035 0.9	inches mm
LWF0603…-HC	9.6	0.071 max 1.80 max	0.047 max 1.20 max	0.043 max 1.10 max	0.018 0.45	0.013 ± 0.004 0.33 ± 0.10	0.033 0.85	0.040 1.02	0.025 0.64	0.025 0.64	0.035 0.9	inches mm
LWF0805	14	0.094 max 2.40 max	0.065 max 1.65 max	0.047 ± 0.004 1.20 ± 0.10	0.026 0.65	0.017 ± 0.004 0.44 ± 0.10	0.042 1.07	0.070 1.78	0.040 1.02	0.030 0.76	0.050 1.27	inches mm
LWF1008	30	0.115 max 2.92 max	0.106 max 2.70 max	0.088 max 2.23 max	0.039 1.00	0.020 ref. 0.50 ref.	0.056 1.42	0.100 2.54	0.040 1.02	0.050 1.27	0.079 2.00	inches mm

Mechanical Specifications - 1210, 1812, 2220



Type/Code	Typical Unit Weight (mg)	A	B	C	D	E	H	I	J	Unit
LWF1210	40	0.126 ± 0.016 3.20 ± 0.40	0.098 ± 0.008 2.50 ± 0.20	0.087 ± 0.008 2.20 ± 0.20	0.039 ± 0.008 1.00 ± 0.20	0.024 ± 0.012 0.60 ± 0.30	0.055 1.40	0.039 1.00	0.071 1.80	inches mm
LWF1210…-HC	40	0.126 ± 0.016 3.20 ± 0.40	0.098 ± 0.008 2.50 ± 0.20	0.087 ± 0.008 2.20 ± 0.20	0.157 ± 0.008 1.00 ± 0.20	0.024 ± 0.012 0.60 ± 0.30	0.055 1.40	0.039 1.00	0.071 1.80	inches mm
LWF1812	160	0.177 ± 0.012 4.50 ± 0.30	0.126 ± 0.008 3.20 ± 0.20	0.126 ± 0.008 3.20 ± 0.20	0.047 ref. 1.20 ref.	0.039 ± 0.012 1.00 ± 0.30	0.063 1.60	0.059 1.50	0.087 2.20	inches mm
LWF1812…-HC	160	0.177 ± 0.012 4.50 ± 0.30	0.126 ± 0.008 3.20 ± 0.20	0.126 ± 0.008 3.20 ± 0.20	0.047 ref. 1.20 ref.	0.039 ± 0.012 1.00 ± 0.30	0.063 1.60	0.059 1.50	0.087 2.20	inches mm

Mechanical Specifications - 2220-HC



Type/Code	Typical Unit Weight (mg)	A	B	C	D	E	H	I	J	Unit
LWF2220	300	0.220 ± 0.012 5.60 ± 0.30	0.197 ± 0.008 5.00 ± 0.20	0.157 ± 0.012 4.00 ± 0.30	0.157 ± 0.008 4.00 ± 0.20	0.028 ± 0.008 0.70 ± 0.20	0.177 4.50	0.079 2.00	0.157 4.00	inches mm
LWF2220…-HC	300	0.220 ± 0.012 5.60 ± 0.30	0.197 ± 0.008 5.00 ± 0.20	0.157 ± 0.012 4.00 ± 0.30	0.157 ± 0.008 4.00 ± 0.20	0.028 ± 0.008 0.70 ± 0.20	0.177 4.50	0.079 2.00	0.157 4.00	inches mm

Electrical Specifications - 0603 Standard							
Part Number	Inductance (µH)	Tolerance	Q typ.	Test Freq (MHz)	SRF (MHz) typ.	DCR (Ω) max.	IDC (mA) max.
LWF0603 _ T1R0	1.0	±10, ±20%	16	7.9	390	0.416	860
LWF0603 _ T1R5	1.5	±10, ±20%	16	7.9	160	0.520	720
LWF0603 _ T1R8	1.8	±10, ±20%	16	7.9	121	0.559	640
LWF0603 _ T2R2	2.2	±10, ±20%	16	7.9	103	0.728	600
LWF0603 _ T2R7	2.7	±10, ±20%	16	7.9	72	0.806	540
LWF0603 _ T3R3	3.3	±10, ±20%	16	7.9	66	0.910	500
LWF0603 _ T3R9	3.9	±10, ±20%	16	7.9	61	1.079	460
LWF0603 _ T4R7	4.7	±10, ±20%	16	7.9	51	1.261	400
LWF0603 _ T5R6	5.6	±10, ±20%	16	7.9	47	1.430	380
LWF0603 _ T6R8	6.8	±10, ±20%	16	7.9	43	1.950	340
LWF0603 _ T8R2	8.2	±10, ±20%	16	7.9	40	2.184	300
LWF0603 _ T100	10	±10, ±20%	14	2.5	36	2.405	280
LWF0603 _ T120	12	±10, ±20%	14	2.5	32	2.964	260
LWF0603 _ T150	15	±10, ±20%	14	2.5	29	3.380	240
LWF0603 _ T180	18	±10, ±20%	14	2.5	28	3.770	220
LWF0603 _ T220	22	±10, ±20%	14	2.5	24	4.693	200
LWF0603 _ T270	27	±10, ±20%	14	2.5	20	6.760	140
LWF0603 _ T330	33	±10, ±20%	14	2.5	15	8.580	120

Electrical Specifications - 0805 Standard							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF0805KTR11	0.11	±10%	25	25	1200	0.05	2000
LWF0805 _ TR12	0.12	±5, ±10%	25	25	1000	0.18	1500
LWF0805 _ TR15	0.15	±5, ±10%	25	25	1000	0.18	1400
LWF0805 _ TR18	0.18	±5, ±10%	30	25	1000	0.20	1400
LWF0805 _ TR22	0.22	±5, ±10%	30	25	830	0.25	1350
LWF0805 _ TR27	0.27	±5, ±10%	30	25	800	0.38	1300
LWF0805 _ TR33	0.33	±5, ±10%	30	25	750	0.35	1200
LWF0805 _ TR39	0.39	±5, ±10%	30	25	700	0.35	1160
LWF0805 _ TR47	0.47	±5, ±10%	30	25	690	0.40	1100
LWF0805 _ TR56	0.56	±5, ±10%	30	25	640	0.40	1040
LWF0805 _ TR62	0.62	±5, ±10%	30	25	640	0.45	980
LWF0805 _ TR68	0.68	±5, ±10%	30	25	510	0.50	900
LWF0805 _ TR82	0.82	±5, ±10%	30	25	500	0.50	900
LWF0805 _ TR91	0.91	±5, ±10%	30	25	500	0.55	900
LWF0805 _ T1R0	1.0	±5, ±10%	20	7.9	470	0.50	840
LWF0805 _ T1R2	1.2	±5, ±10%	20	7.9	400	0.75	800
LWF0805 _ T1R5	1.5	±5, ±10%	25	7.9	400	1.00	720
LWF0805 _ T1R8	1.8	±5, ±10%	25	7.9	230	1.00	660
LWF0805 _ T2R2	2.2	±5, ±10%	25	7.9	200	1.05	600
LWF0805 _ T2R7	2.7	±5, ±10%	25	7.9	130	1.18	500
LWF0805 _ T3R3	3.3	±5, ±10%	25	7.9	160	1.26	480
LWF0805 _ T3R9	3.9	±5, ±10%	25	7.9	130	1.75	440
LWF0805 _ T4R7	4.7	±5, ±10%	25	7.9	120	1.87	390
LWF0805 _ T5R6	5.6	±5, ±10%	25	7.9	90	2.00	340
LWF0805 _ T6R8	6.8	±5, ±10%	25	7.9	55	2.15	300
LWF0805 _ T8R2	8.2	±5, ±10%	25	7.9	40	2.37	280
LWF0805 _ T100	10	±5, ±10%	16	2.5	40	2.55	260
LWF0805 _ T120	12	±5, ±10%	16	2.5	37	2.80	220
LWF0805 _ T150	15	±5, ±10%	16	2.5	30	3.80	200
LWF0805 _ T180	18	±5, ±10%	16	2.5	23	4.48	180
LWF0805 _ T220	22	±5, ±10%	16	2.5	20	6.30	160
LWF0805 _ T270	27	±5, ±10%	16	2.5	19	6.85	140
LWF0805 _ T330	33	±5, ±10%	16	2.5	18	7.60	120
LWF0805 _ T390	39	±5, ±10%	15	2.5	16	8.20	100

Electrical Specifications - 1008 Standard							
Part Number	Inductance (µH)	Tolerance	Q typ.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) Max	IDC (mA) Max
LWF1008 _ TR39	0.39	±10%, ±20%	12	7.9	400	0.40	500
LWF1008 _ TR47	0.47	±10%, ±20%	12	25	600	0.27	700
LWF1008 _ TR56	0.56	±10%, ±20%	12	7.9	230	0.62	700
LWF1008 _ TR68	0.68	±10%, ±20%	12	7.9	230	0.62	700
LWF1008 _ TR82	0.82	±10%, ±20%	12	7.9	230	0.62	700
LWF1008 _ TR90	0.90	±10%, ±20%	20	7.9	300	0.35	1400
LWF1008 _ T1R0	1.0	±10%, ±20%	18	7.9	230	0.62	700
LWF1008 _ T1R2	1.2	±10%, ±20%	18	7.9	210	0.68	650
LWF1008 _ T1R5	1.5	±10%, ±20%	18	7.9	190	0.76	630
LWF1008 _ T1R8	1.8	±10%, ±20%	18	7.9	170	0.84	600
LWF1008 _ T2R0	2.0	±10%, ±20%	18	7.9	160	1.10	550
LWF1008 _ T2R2	2.2	±10%, ±20%	18	7.9	150	1.10	520
LWF1008 _ T2R7	2.7	±10%, ±20%	18	7.9	135	1.28	490
LWF1008 _ T3R3	3.3	±10%, ±20%	18	7.9	120	1.46	450
LWF1008 _ T3R9	3.9	±10%, ±20%	18	7.9	105	2.30	300
LWF1008 _ T4R7	4.7	±10%, ±20%	18	7.9	90	2.00	400
LWF1008 _ T5R6	5.6	±10%, ±20%	15	7.9	80	1.80	380
LWF1008 _ T6R8	6.8	±10%, ±20%	15	7.9	70	2.00	360
LWF1008 _ T8R2	8.2	±10%, ±20%	15	7.9	65	2.65	330
LWF1008 _ T100	10	±10%, ±20%	12	2.5	60	2.95	300
LWF1008 _ T150	15	±10%, ±20%	12	2.5	30	3.70	280
LWF1008 _ T180	18	±10%, ±20%	12	2.5	26	4.00	160
LWF1008 _ T220	22	±10%, ±20%	12	2.5	22	6.14	270
LWF1008 _ T330	33	±10%, ±20%	10	2.5	12	7.00	200
LWF1008 _ T390	39	±10%, ±20%	10	2.5	16	10.00	180
LWF1008 _ T470	47	±10%, ±20%	10	2.5	10	10.70	160
LWF1008 _ T560	56	±10%, ±20%	10	2.5	8	12.00	170
LWF1008 _ T680	68	±10%, ±20%	10	2.5	6	13.50	145
LWF1008 _ T820	82	±10%, ±20%	8	2.5	6	20.00	100
LWF1008 _ T101	100	±10%, ±20%	8	1	4	21.00	80

Electrical Specifications - 1210 Standard							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF1210MTR18	0.18	±20%	30	25.20	685	0.28	450
LWF1210MTR22	0.22	±20%	30	25.20	560	0.32	450
LWF1210MTR27	0.27	±20%	30	25.20	525	0.36	450
LWF1210MTR33	0.33	±20%	30	25.20	520	0.40	450
LWF1210MTR39	0.39	±20%	30	25.20	470	0.45	450
LWF1210MTR47	0.47	±20%	30	25.20	430	0.50	450
LWF1210MTR56	0.56	±20%	30	25.20	395	0.55	450
LWF1210MTR68	0.68	±20%	30	25.20	370	0.60	450
LWF1210MTR82	0.82	±20%	30	25.20	310	0.65	450
LWF1210_T1R0	1.0	±5%, ±10%	30	7.96	295	0.70	400
LWF1210_T1R2	1.2	±5%, ±10%	30	7.96	255	0.75	390
LWF1210_T1R5	1.5	±5%, ±10%	30	7.96	160	0.85	370
LWF1210_T1R8	1.8	±5%, ±10%	30	7.96	125	0.90	350
LWF1210_T2R2	2.2	±5%, ±10%	30	7.96	100	1.00	320
LWF1210_T2R7	2.7	±5%, ±10%	30	7.96	65	1.10	290
LWF1210_T3R3	3.3	±5%, ±10%	30	7.96	55	1.20	260
LWF1210_T3R9	3.9	±5%, ±10%	30	7.96	50	1.30	250
LWF1210_T4R7	4.7	±5%, ±10%	30	7.96	45	1.50	220
LWF1210_T5R6	5.6	±5%, ±10%	30	7.96	40	1.60	200
LWF1210_T6R8	6.8	±5%, ±10%	30	7.96	35	1.80	180
LWF1210_T8R2	8.2	±5%, ±10%	30	7.96	30	2.00	170
LWF1210_T100	10	±5%, ±10%	30	2.52	30	2.10	150
LWF1210_T120	12	±5%, ±10%	30	2.52	28	2.50	140
LWF1210_T150	15	±5%, ±10%	30	2.52	25	2.80	130
LWF1210_T180	18	±5%, ±10%	30	2.52	22	3.30	120
LWF1210_T220	22	±5%, ±10%	30	2.52	19	3.70	110
LWF1210_T270	27	±5%, ±10%	30	2.52	18	5.00	80
LWF1210_T330	33	±5%, ±10%	30	2.52	17	5.60	70
LWF1210_T390	39	±5%, ±10%	30	2.52	15	6.40	65
LWF1210_T470	47	±5%, ±10%	30	2.52	14	7.00	60
LWF1210_T560	56	±5%, ±10%	30	2.52	13	8.00	55
LWF1210_T680	68	±5%, ±10%	30	2.52	11	9.00	50
LWF1210_T820	82	±5%, ±10%	30	2.52	10	10.00	45
LWF1210_T101	100	±5%, ±10%	20	0.796	9	11.00	40
LWF1210_T121	120	±5%, ±10%	20	0.796	8	11.00	70
LWF1210_T151	150	±5%, ±10%	20	0.796	7	15.00	65

Electrical Specifications - 1812 Standard							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF1812MTR18	0.18	±20%	35	25.20	570.0	0.24	700
LWF1812MTR22	0.22	±20%	40	25.20	505.0	0.25	665
LWF1812MTR27	0.27	±20%	40	25.20	450.0	0.26	635
LWF1812MTR33	0.33	±20%	40	25.20	425.0	0.28	605
LWF1812MTR39	0.39	±20%	40	25.20	390.0	0.30	575
LWF1812MTR47	0.47	±20%	40	25.20	350.0	0.32	545
LWF1812MTR56	0.56	±20%	40	25.20	325.0	0.36	520
LWF1812MTR68	0.68	±20%	40	25.20	300.0	0.40	500
LWF1812MTR82	0.82	±20%	40	25.20	275.0	0.45	475
LWF1812_T1R0	1.0	±5%, ±10%	50	7.96	250.0	0.50	450
LWF1812_T1R2	1.2	±5%, ±10%	50	7.96	240.0	0.55	430
LWF1812_T1R5	1.5	±5%, ±10%	50	7.96	210.0	0.60	410
LWF1812_T1R8	1.8	±5%, ±10%	50	7.96	190.0	0.65	390
LWF1812_T2R2	2.2	±5%, ±10%	50	7.96	160.0	0.70	380
LWF1812_T2R7	2.7	±5%, ±10%	50	7.96	150.0	0.75	370
LWF1812_T3R3	3.3	±5%, ±10%	50	7.96	110.0	0.80	355
LWF1812_T3R9	3.9	±5%, ±10%	50	7.96	100.0	0.90	330
LWF1812_T4R7	4.7	±5%, ±10%	50	7.96	80.0	1.00	315
LWF1812_T5R6	5.6	±5%, ±10%	50	7.96	50.0	1.10	300
LWF1812_T6R8	6.8	±5%, ±10%	50	7.96	35.0	1.20	285
LWF1812_T8R2	8.2	±5%, ±10%	50	7.96	28.0	1.40	270
LWF1812_T100	10	±5%, ±10%	50	2.52	22.0	1.60	250
LWF1812_T120	12	±5%, ±10%	50	2.52	20.0	2.00	225
LWF1812_T150	15	±5%, ±10%	50	2.52	18.0	2.50	200
LWF1812_T180	18	±5%, ±10%	50	2.52	16.0	2.80	190
LWF1812_T220	22	±5%, ±10%	50	2.52	14.0	3.20	180
LWF1812_T270	27	±5%, ±10%	50	2.52	13.0	3.60	170
LWF1812_T330	33	±5%, ±10%	50	2.52	12.0	4.00	160
LWF1812_T390	39	±5%, ±10%	50	2.52	11.0	4.50	150
LWF1812_T470	47	±5%, ±10%	50	2.52	10.5	5.00	140
LWF1812_T560	56	±5%, ±10%	50	2.52	10.0	5.50	135
LWF1812_T680	68	±5%, ±10%	50	2.52	9.5	6.00	130
LWF1812_T820	82	±5%, ±10%	50	2.52	8.5	7.00	120
LWF1812_T101	100	±5%, ±10%	40	0.796	8.0	8.00	110
LWF1812_T121	120	±5%, ±10%	40	0.796	7.0	8.00	110
LWF1812_T151	150	±5%, ±10%	40	0.796	6.0	9.00	105
LWF1812_T181	180	±5%, ±10%	40	0.796	5.5	9.5	102
LWF1812_T221	220	±5%, ±10%	40	0.796	5.0	10.0	100
LWF1812_T271	270	±5%, ±10%	40	0.796	4.5	12.0	92
LWF1812_T331	330	±5%, ±10%	40	0.796	4.0	14.0	85
LWF1812_T391	390	±5%, ±10%	40	0.796	3.5	18.0	80
LWF1812_T471	470	±5%, ±10%	40	0.796	3.5	26.0	62
LWF1812_T561	560	±5%, ±10%	30	0.796	3.0	30.0	50
LWF1812_T681	680	±5%, ±10%	30	0.796	3.0	30.0	50
LWF1812_T821	820	±5%, ±10%	30	0.796	2.5	35.0	30
LWF1812_T102	1000	±5%, ±10%	20	0.252	2.5	40.0	30

Electrical Specifications - 2220 Standard							
Part Number	Inductance (mH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF2220 _ T122	1.2	±5, ±10%	20	0.252	1.5	17	75
LWF2220 _ T152	1.5	±5, ±10%	20	0.252	1.4	20	70
LWF2220 _ T182	1.8	±5, ±10%	20	0.252	1.3	30	60
LWF2220 _ T222	2.2	±5, ±10%	20	0.252	1.2	35	55
LWF2220 _ T272	2.7	±5, ±10%	20	0.252	1.1	55	45
LWF2220 _ T332	3.3	±5, ±10%	20	0.252	1.0	60	40
LWF2220 _ T392	3.9	±5, ±10%	20	0.252	1.0	70	38
LWF2220 _ T472	4.7	±5, ±10%	20	0.252	0.9	78	36
LWF2220 _ T562	5.6	±5, ±10%	20	0.252	0.8	85	33
LWF2220 _ T682	6.8	±5, ±10%	20	0.252	0.7	110	30
LWF2220 _ T822	8.2	±5, ±10%	20	0.252	0.6	125	28
LWF2220 _ T103	10	±5, ±10%	15	0.0796	0.5	150	25

Electrical Specifications - 0603 High Current							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF0603 _ TR10-HC	0.10	±5%, ±10%, ±20%	12	7.9	1150	0.13	1700
LWF0603 _ TR12-HC	0.12	±5%, ±10%, ±20%	12	7.9	1100	0.15	1700
LWF0603 _ TR15-HC	0.15	±5%, ±10%, ±20%	15	7.9	1050	0.15	1600
LWF0603 _ TR18-HC	0.18	±5%, ±10%, ±20%	15	7.9	950	0.15	1500
LWF0603 _ TR22-HC	0.22	±5%, ±10%, ±20%	15	7.9	900	0.30	1200
LWF0603 _ TR24-HC	0.24	±5%, ±10%, ±20%	15	7.9	850	0.16	1460
LWF0603 _ TR27-HC	0.27	±5%, ±10%, ±20%	15	7.9	835	0.30	1460
LWF0603 _ TR33-HC	0.33	±5%, ±10%, ±20%	15	7.9	725	0.40	1420
LWF0603 _ TR39-HC	0.39	±5%, ±10%, ±20%	15	7.9	680	0.41	1400
LWF0603 _ TR47-HC	0.47	±5%, ±10%, ±20%	15	7.9	640	0.43	1400
LWF0603 _ TR56-HC	0.56	±5%, ±10%, ±20%	15	7.9	630	0.44	1400
LWF0603 _ TR68-HC	0.68	±5%, ±10%, ±20%	15	7.9	510	0.52	1340
LWF0603 _ TR78-HC	0.78	±5%, ±10%, ±20%	15	7.9	465	0.63	1300
LWF0603 _ TR82-HC	0.82	±5%, ±10%, ±20%	15	7.9	460	0.69	1200
LWF0603 _ T1R0-HC	1.0	±5%, ±10%, ±20%	15	7.9	320	0.81	1100
LWF0603 _ T1R2-HC	1.2	±5%, ±10%, ±20%	15	7.9	270	0.87	1000
LWF0603 _ T1R5-HC	1.5	±5%, ±10%, ±20%	15	7.9	230	0.96	920
LWF0603 _ T1R8-HC	1.8	±5%, ±10%, ±20%	15	7.9	210	1.10	900
LWF0603 _ T2R2-HC	2.2	±5%, ±10%, ±20%	15	7.9	115	1.20	740
LWF0603 _ T2R7-HC	2.7	±5%, ±10%, ±20%	15	7.9	100	1.38	700
LWF0603 _ T3R3-HC	3.3	±5%, ±10%, ±20%	15	7.9	84	1.50	680
LWF0603 _ T3R9-HC	3.9	±5%, ±10%, ±20%	15	7.9	75	1.50	600
LWF0603 _ T4R7-HC	4.7	±5%, ±10%, ±20%	15	7.9	67	2.10	580
LWF0603 _ T5R6-HC	5.6	±5%, ±10%, ±20%	15	7.9	55	2.37	540
LWF0603 _ T6R8-HC	6.8	±5%, ±10%, ±20%	15	7.9	48	3.10	500
LWF0603 _ T7R8-HC	7.8	±5%, ±10%, ±20%	15	7.9	40	3.35	460
LWF0603 _ T8R2-HC	8.2	±5%, ±10%, ±20%	15	7.9	38	3.50	440
LWF0603 _ T100-HC	10	±5%, ±10%, ±20%	15	7.9	32	4.46	400

Electrical Specifications - 0805 High Current							
Part Number	Inductance (µH)	Tolerance	Q typ.	Test Freq (MHz)	SRF (MHz) typ.	DCR (Ω) max.	IDC (mA) max.
LWF0805 _ TR47-HC	0.47	±5%, ±10%, ±20%	14	7.9	850	0.156	1400
LWF0805 _ TR68-HC	0.68	±5%, ±10%, ±20%	14	7.9	765	0.195	1200
LWF0805 _ T1R0-HC	1.0	±5%, ±10%, ±20%	14	7.9	208	0.169	1100
LWF0805 _ T1R2-HC	1.2	±5%, ±10%, ±20%	14	7.9	159	0.208	960
LWF0805 _ T1R5-HC	1.5	±5%, ±10%, ±20%	14	7.9	159	0.221	920
LWF0805 _ T1R8-HC	1.8	±5%, ±10%, ±20%	14	7.9	112	0.260	860
LWF0805 _ T2R2-HC	2.2	±5%, ±10%, ±20%	13	7.9	87	0.286	740
LWF0805 _ T2R7-HC	2.7	±5%, ±10%, ±20%	13	7.9	72	0.325	680
LWF0805 _ T3R3-HC	3.3	±5%, ±10%, ±20%	12	7.9	70	0.364	620
LWF0805 _ T3R9-HC	3.9	±5%, ±10%, ±20%	14	7.9	61	0.494	580
LWF0805 _ T4R7-HC	4.7	±5%, ±10%, ±20%	14	7.9	51	0.559	520
LWF0805 _ T5R6-HC	5.6	±5%, ±10%, ±20%	12	7.9	47	0.650	480
LWF0805 _ T6R8-HC	6.8	±5%, ±10%, ±20%	14	7.9	46	0.884	420
LWF0805 _ T8R2-HC	8.2	±5%, ±10%, ±20%	13	7.9	33	0.949	400
LWF0805 _ T100-HC	10	±5%, ±10%, ±20%	14	2.5	31	1.105	360
LWF0805 _ T120-HC	12	±5%, ±10%, ±20%	14	2.5	30	1.170	340
LWF0805 _ T150-HC	15	±5%, ±10%, ±20%	15	2.5	28	1.820	300
LWF0805 _ T180-HC	18	±5%, ±10%, ±20%	15	2.5	27	2.010	280
LWF0805 _ T220-HC	22	±5%, ±10%, ±20%	15	2.5	20	2.288	240
LWF0805 _ T270-HC	27	±5%, ±10%, ±20%	15	2.5	17	2.600	220
LWF0805 _ T330-HC	33	±5%, ±10%, ±20%	15	2.5	17	3.055	200
LWF0805 _ T470-HC	47	±5%, ±10%, ±20%	14	2.5	15	4.420	160
LWF0805 _ T560-HC	56	±5%, ±10%, ±20%	14	2.5	10	5.746	150
LWF0805 _ T680-HC	68	±5%, ±10%, ±20%	14	2.5	10	5.785	140
LWF0805 _ T820-HC	82	±5%, ±10%, ±20%	14	2.5	10	9.750	100
LWF0805 _ T101-HC	100	±5%, ±10%, ±20%	10	1	9	9.750	100

Electrical Specifications - 1210 High Current							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF1210_T1R0-HC	1.0	±5%, ±20%	10	7.96	145	0.156	770
LWF1210_T1R5-HC	1.5	±5%, ±20%	10	7.96	100	0.195	580
LWF1210_T2R2-HC	2.2	±5%, ±20%	10	7.96	80	0.260	480
LWF1210_T3R3-HC	3.3	±5%, ±20%	10	7.96	60	0.325	400
LWF1210_T4R7-HC	4.7	±5%, ±20%	10	7.96	50	0.520	320
LWF1210_T6R8-HC	6.8	±5%, ±20%	10	7.96	40	0.650	280
LWF1210_T100-HC	10	±5%, ±20%	15	2.52	30	1.105	220
LWF1210_T150-HC	15	±5%, ±20%	15	2.52	27	1.690	180
LWF1210_T220-HC	22	±5%, ±20%	15	2.52	22	2.600	145
LWF1210_T270-HC	27	±5%, ±20%	15	2.52	19	3.000	125
LWF1210_T330-HC	33	±5%, ±20%	15	2.52	17	3.640	115
LWF1210_T470-HC	47	±5%, ±20%	20	2.52	15	5.460	105
LWF1210_T680-HC	68	±5%, ±20%	20	2.52	11	8.450	85
LWF1210_T820-HC	82	±5%, ±20%	20	2.52	10	8.710	80
LWF1210_T101-HC	100	±5%, ±20%	20	0.796	9	10.140	75

Electrical Specifications - 1812 High Current							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF1812_T1R0-HC	1.0	±5%, ±10%	10	7.96	265	0.11	1050
LWF1812_T1R2-HC	1.2	±5%, ±10%	10	7.96	180	0.12	1000
LWF1812_T1R5-HC	1.5	±5%, ±10%	10	7.96	170	0.15	950
LWF1812_T1R8-HC	1.8	±5%, ±10%	10	7.96	105	0.16	900
LWF1812_T2R2-HC	2.2	±5%, ±10%	10	7.96	80	0.18	850
LWF1812_T2R7-HC	2.7	±5%, ±10%	10	7.96	60	0.20	800
LWF1812_T3R3-HC	3.3	±5%, ±10%	10	7.96	55	0.22	750
LWF1812_T3R9-HC	3.9	±5%, ±10%	10	7.96	45	0.24	700
LWF1812_T4R7-HC	4.7	±5%, ±10%	10	7.96	43	0.27	650
LWF1812_T5R6-HC	5.6	±5%, ±10%	10	7.96	40	0.30	650
LWF1812_T6R8-HC	6.8	±5%, ±10%	10	7.96	35	0.35	600
LWF1812_T8R2-HC	8.2	±5%, ±10%	10	7.96	30	0.40	600
LWF1812_T100-HC	10	±5%, ±10%	10	2.52	27	0.50	550
LWF1812_T120-HC	12	±5%, ±10%	10	2.52	25	0.60	500
LWF1812_T150-HC	15	±5%, ±10%	10	2.52	20	0.70	450
LWF1812_T180-HC	18	±5%, ±10%	10	2.52	19	0.80	400
LWF1812_T220-HC	22	±5%, ±10%	10	2.52	18	0.90	370
LWF1812_T270-HC	27	±5%, ±10%	10	2.52	16	1.20	330
LWF1812_T330-HC	33	±5%, ±10%	10	2.52	15	1.40	300
LWF1812_T390-HC	39	±5%, ±10%	10	2.52	13	1.60	280
LWF1812_T470-HC	47	±5%, ±10%	10	2.52	12	1.90	260
LWF1812_T560-HC	56	±5%, ±10%	10	2.52	10	2.20	240
LWF1812_T680-HC	68	±5%, ±10%	10	2.52	10	2.60	220
LWF1812_T820-HC	82	±5%, ±10%	10	2.52	8.5	3.50	200
LWF1812_T101-HC	100	±5%, ±10%	20	0.796	8.0	4.00	180
LWF1812_T121-HC	120	±5%, ±10%	20	0.796	7.0	4.50	160
LWF1812_T151-HC	150	±5%, ±10%	20	0.796	6.5	6.50	140
LWF1812_T181-HC	180	±5%, ±10%	20	0.796	6.0	7.50	120
LWF1812_T221-HC	220	±5%, ±10%	20	0.796	5.5	9.00	120
LWF1812_T271-HC	270	±5%, ±10%	20	0.796	5.0	11.00	100
LWF1812_T331-HC	330	±5%, ±10%	20	0.796	4.5	13.00	90
LWF1812_T391-HC	390	±5%, ±10%	20	0.796	4.0	14.00	85
LWF1812_T471-HC	470	±5%, ±10%	20	0.796	3.5	16.00	75
LWF1812_T561-HC	560	±5%, ±10%	20	0.796	3.0	21.00	70
LWF1812_T681-HC	680	±5%, ±10%	20	0.796	2.5	24.00	65
LWF1812_T821-HC	820	±5%, ±10%	20	0.796	2.5	45.00	60

Electrical Specifications - 2220 High Current							
Part Number	Inductance (µH)	Tolerance	Q min.	Test Freq (MHz)	SRF (MHz) min.	DCR (Ω) max.	IDC (mA) max.
LWF2220 _ T1R0-HC	1.0	±10, ±20%	10	7.96	95	0.03	1800
LWF2220 _ T1R2-HC	1.2	±10, ±20%	10	7.96	70	0.035	1700
LWF2220 _ T1R5-HC	1.5	±10, ±20%	10	7.96	55	0.04	1600
LWF2220 _ T1R8-HC	1.8	±10, ±20%	10	7.96	47	0.05	1400
LWF2220 _ T2R2-HC	2.2	±10, ±20%	10	7.96	42	0.06	1300
LWF2220 _ T2R7-HC	2.7	±10, ±20%	10	7.96	37	0.07	1200
LWF2220 _ T3R3-HC	3.3	±10, ±20%	10	7.96	34	0.08	1120
LWF2220 _ T3R9-HC	3.9	±10, ±20%	10	7.96	32	0.09	1050
LWF2220 _ T4R7-HC	4.7	±10, ±20%	10	7.96	29	0.11	950
LWF2220 _ T5R6-HC	5.6	±10, ±20%	10	7.96	26	0.13	880
LWF2220 _ T6R8-HC	6.8	±10, ±20%	10	7.96	24	0.15	810
LWF2220 _ T8R2-HC	8.2	±10, ±20%	10	7.96	22	0.18	750
LWF2220 _ T100-HC	10	±10, ±20%	10	2.52	19	0.21	690
LWF2220 _ T120-HC	12	±10, ±20%	10	2.52	17	0.25	630
LWF2220 _ T150-HC	15	±10, ±20%	10	2.52	16	0.30	580
LWF2220 _ T180-HC	18	±10, ±20%	10	2.52	14	0.36	530
LWF2220 _ T220-HC	22	±5, ±10%	10	2.52	13	0.43	480
LWF2220 _ T270-HC	27	±5, ±10%	10	2.52	11.5	0.52	440
LWF2220 _ T330-HC	33	±5, ±10%	10	2.52	10.5	0.62	400
LWF2220 _ T390-HC	39	±5, ±10%	10	2.52	9.5	0.72	370
LWF2220 _ T470-HC	47	±5, ±10%	10	2.52	8.5	0.85	340
LWF2220 _ T560-HC	56	±5, ±10%	10	2.52	7.8	1.0	310
LWF2220 _ T680-HC	68	±5, ±10%	10	2.52	7.0	1.2	290
LWF2220 _ T820-HC	82	±5, ±10%	10	2.52	6.4	1.4	270
LWF2220 _ T101-HC	100	±5, ±10%	20	0.796	6.0	1.6	250
LWF2220 _ T121-HC	120	±5, ±10%	20	0.796	5.4	1.9	230
LWF2220 _ T151-HC	150	±5, ±10%	20	0.796	4.8	2.2	210
LWF2220 _ T181-HC	180	±5, ±10%	20	0.796	4.4	2.8	190
LWF2220 _ T221-HC	220	±5, ±10%	20	0.796	3.9	3.4	170
LWF2220 _ T271-HC	270	±5, ±10%	20	0.796	3.6	4.2	155
LWF2220 _ T331-HC	330	±5, ±10%	20	0.796	3.2	4.9	140
LWF2220 _ T391-HC	390	±5, ±10%	20	0.796	2.9	5.8	130
LWF2220 _ T471-HC	470	±5, ±10%	20	0.796	2.6	7.0	120
LWF2220 _ T561-HC	560	±5, ±10%	20	0.796	2.4	8.5	110
LWF2220 _ T681-HC	680	±5, ±10%	20	0.796	2.2	10	100
LWF2220 _ T821-HC	820	±5, ±10%	20	0.796	2.0	13	90
LWF2220 _ T102-HC	1000	±5, ±10%	20	0.252	1.8	15	85

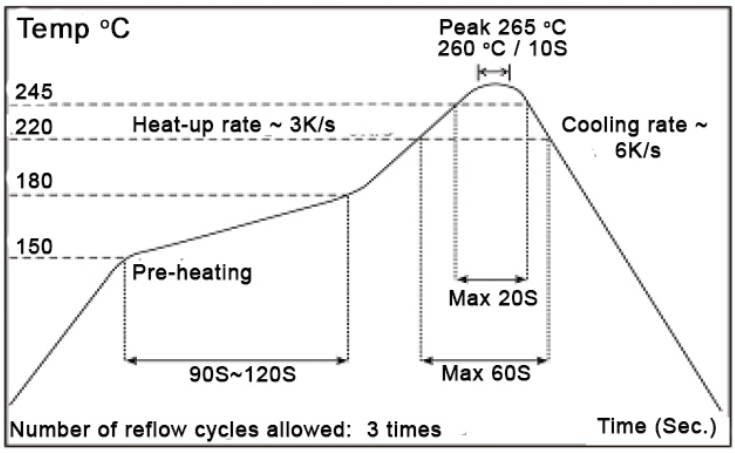
Electrical Performance Test		
Test	Test Specification	Test Condition
Inductance	Refer to Electrical Specifications tables	HP4291 or HP4284
Q		HP4291 or HP4284
SRF		HP4291
DC Resistance RDC		Agilent 34401A
Rated Current IDC		Applied the current to coils. The inductance change should be less than 10% to initial value

Mechanical Performance Test		
Test	Test Specification	Test Condition
Solderability	The electrodes shall be at least 90% covered with new solder coating	Lead-free inductor: after fluxing (alpha 100 or equivalent), inductor shall be dipped in a melted solder bath at 245±5°C, 5±0.5 seconds
Resistance to Soldering Heat	Appearance: No damage	Pre-heating: 150°C, 1 minute Solder Temperature: 260±5°C Immersion Time: 10±1 seconds
Vibration	Appearance: No damage L change: within ±10% Q change: within ±30% DCR: within specification	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1 minute Amplitude: 1.5 mm Time: 2 hours for each axis (X, Y and Z), total 6 hours

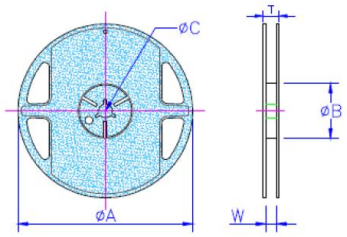
Climatic Test		
Test	Test Specification	Test Condition
Temperature Cycle	Appearance: No damage L change: within ± 10% Q change: within ± 30% DCR: within specification	One Cycle: Step 1: -25 ± 3, 30 min. Step 2: 25 ± 2, 3 min. Step 3: 85 ± 3, 30 min. Step 4: 25 ± 2, 3 min. Total: 100 cycles Measured after exposure in the room condition for 24 hours
Damp Heat with Load		Temperature: 40 ± 2°C Relative Humidity: 90~95% Time: 1000 hours Measured after exposure in the room condition for 24 hours
High Temperature Storage		Temperature: 85 ± 3°C Applied current: Rated current Time: 1000 hours Measured after exposure in the room condition for 24 hours
Low Temperature Storage		Temperature : -25 ± 3°C Time: 1000 hours Measured after exposure in the room condition for 24 hours

Storage Temperature: 25 ± 3°C. Humidity < 80% R.H.
Operating Temperature Range: -40 ~ +85 °C

Reflow Chart:

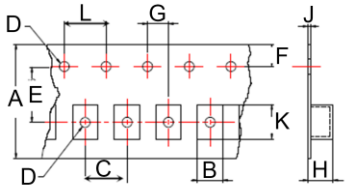


Reel Specifications



Type/Code	A	B	C	W	T	Unit
LWF0603	7.008 ± 0.079 178.00 ± 2.00	2.362 ± 0.020 60.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.354 ± 0.012 9.00 ± 0.30	0.472 ± 0.039 12.00 ± 1.00	inches mm
LWF0805	7.008 ± 0.079 178.00 ± 2.00	2.362 ± 0.020 60.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.354 ± 0.012 9.00 ± 0.30	0.472 ± 0.039 12.00 ± 1.00	inches mm
LWF1008	7.008 ± 0.079 178.00 ± 2.00	2.362 ± 0.020 60.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.354 ± 0.012 9.00 ± 0.30	0.472 ± 0.039 12.00 ± 1.00	inches mm
LWF1210	7.008 ± 0.079 178.00 ± 2.00	2.362 ± 0.020 60.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.354 ± 0.012 9.00 ± 0.30	0.472 ± 0.039 12.00 ± 1.00	inches mm
LWF1812	7.008 ± 0.079 178.00 ± 2.00	3.150 ± 0.020 80.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.520 ± 0.012 13.20 ± 0.30	0.630 ± 0.039 16.00 ± 1.00	inches mm
LWF2220	12.992 ± 0.079 330.00 ± 2.00	3.937 ± 0.020 100.00 ± 0.50	0.512 ± 0.012 13.00 ± 0.30	0.685 ± 0.012 17.40 ± 0.30	0.866 ± 0.039 22.00 ± 1.00	inches mm

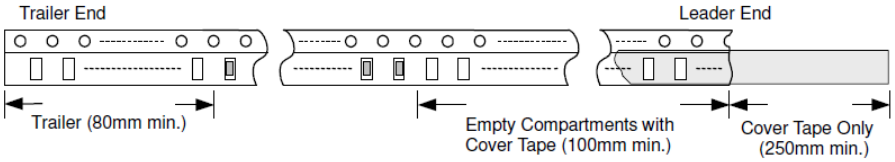
Packaging Specifications - Plastic Tape



Type/Code	A	B	C	E	F	D	Unit
LWF0603	0.315 ± 0.008 8.00 ± 0.20	0.049 ± 0.004 1.25 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm
LWF0805	0.315 ± 0.008 8.00 ± 0.20	0.073 ± 0.004 1.85 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm
LWF1008	0.315 ± 0.008 8.00 ± 0.20	0.110 ± 0.004 2.80 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm
LWF1210	0.315 ± 0.008 8.00 ± 0.20	0.117 ± 0.004 2.96 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	0.138 ± 0.002 3.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm
LWF1812	0.472 ± 0.008 12.00 ± 0.20	0.130 ± 0.004 3.30 ± 0.10	0.315 ± 0.004 8.00 ± 0.10	0.217 ± 0.002 5.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm
LWF2220	0.630 ± 0.008 16.00 ± 0.20	0.211 ± 0.004 5.35 ± 0.10	0.472 ± 0.004 12.00 ± 0.10	0.295 ± 0.002 7.50 ± 0.05	0.069 ± 0.004 1.75 ± 0.10	0.059 1.50	inches mm

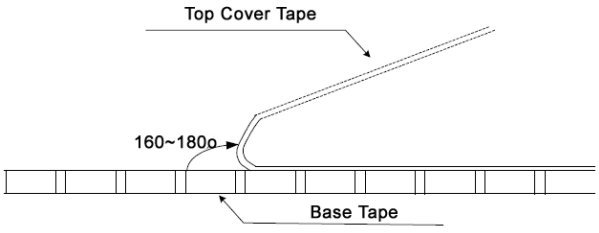
Type/Code	G	H	J	K	L	Unit
LWF0603	0.079 ± 0.002 2.00 ± 0.05	0.039 ± 0.002 1.00 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.075 ± 0.004 1.90 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm
LWF0805	0.079 ± 0.002 2.00 ± 0.05	0.057 ± 0.002 1.45 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.100 ± 0.004 2.55 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm
LWF1008	0.079 ± 0.002 2.00 ± 0.05	0.087 ± 0.002 2.22 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.116 ± 0.004 2.95 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm
LWF1210	0.079 ± 0.002 2.00 ± 0.05	0.094 ± 0.002 2.40 ± 0.05	0.009 ± 0.002 0.23 ± 0.05	0.142 ± 0.004 3.60 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm
LWF1812	0.079 ± 0.002 2.00 ± 0.05	0.138 ± 0.002 3.50 ± 0.05	0.012 ± 0.002 0.30 ± 0.05	0.197 ± 0.004 5.00 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm
LWF2220	0.079 ± 0.002 2.00 ± 0.05	0.217 ± 0.002 5.50 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.240 ± 0.004 6.10 ± 0.10	0.157 ± 0.004 4.00 ± 0.10	inches mm

Leader / Trailer Tape



Cover Tape Peel Strength

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditions:
Temperature: 5 ~ 35 °C
Humidity: 45 ~ 85%
Atmospheric pressure: 860 ~ 1060 HPA



RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status

Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
LWF	Surface Mount Ferrite Wirewound Inductor	SMD	YES	100% Matte Sn	Aug-05	05/31

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

L	W	F	1	8	1	2	K	T	1	R	0	-	H	C

Product Series

LWF	Wirewound Inductor

Size

0603
0805
1008
1210
1812
2220

Tolerance

Code	Tol
J	5%
K	10%
M	20%

Packaging

Code	Description	Size	Quantity
T	Tape and Reel	0603	4000
		0805	2000
		1008	
		1210	
		1812	500
		2220	1000

Inductance

Code	Inductance
R12	120 nH
R27	270 nH
2R7	2700 nH
100	10 µH
220	12 µH

Design

Code	Design
(blank)	Standard
-HC	High Current

Legacy Part Number:

N	L	0	5	K	T	C	R	1	0

Product Series	
NL	Wirewound Inductor

Code	EIA
05	0805
08	1008
10	1210
12	1812
20	2220

Tolerance	
Code	Tol
J	±5%
K	±10%
M	±20%

Packaging			
Code	Description	Size	Quantity
T	Tape and Reel	05, 08, 10	2,000
		12	500
		20	1,000

Design	
Code	Design
	Standard
C	High Current
L	Low Profile

Inductance	
Code	Inductance
R12	120nH
R27	270nH
2R7	2700nH
100	10µH