

WOUND SHIELDED INDUCTOR CHIPS

T Y P E W I C F

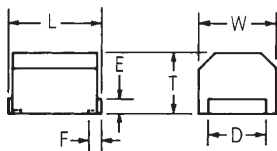
FEATURES

- Excellent solderability by reflow soldering, flow soldering or soldering iron.
- Excellent for automatic insertion in the higher density circuit design.
- Resistant to external shocks and pressure.
- Highly reliable in wide temperature and humidity ranges. Excellent Q characteristics.
- Inductance of 1 to 100 μ H (WICF1008), 1 to 1000 μ H (WICF1210) and 1 to 330 μ H (WICF1812).
- Ideal application for power supply line, radio, auto, telecommunications, tuners instrumental and hybrid ICs.

DIMENSIONS

Unit : mm
(Dimensions in inches)

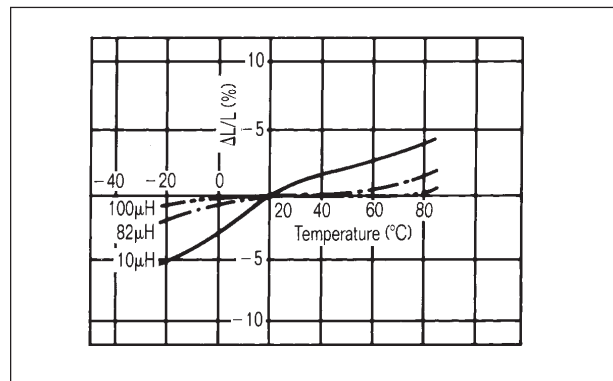
Type	L	W	T	D	E	F
WICF1008	2.5±0.2 (.100±.008)	2.0±0.2 (.080±.008)	1.8±0.2 (.072±.008)	1.4±0.1 (.056±.004)	0.5±0.005 (.02±.002)	0.4±0.005 (.016±.002)
WICF1210	3.2±0.2 (.126±.008)	2.5±0.2 (.098±.008)	2.2±0.2 (.087±.008)	1.9±0.1 (.075±.004)	0.5±0.005 (.02±.002)	0.4±0.005 (.016±.002)
WICF1812	4.5±0.3 (.177±.008)	3.2±0.2 (.126±.008)	3.2±0.2 (.126±.008)	2.6±0.1 (.102±.004)	0.5±0.005 (.02±.002)	0.4±0.005 (.016±.002)



CHARACTERISTICS

Temperature rise	20°C max.
Ambient temperature	80°C
Storage temperature	-40°C to + 100°C
Operating temperature	-20°C to + 100°C
Terminal tensile strength	1 kg min. (0.5kg for the WICF1210 & WICF1008)
Current rating	Value obtained when current flows and when temperature has risen to 20°C or value obtained when LC current flows and when the initial value of inductance has fallen by 10%, whichever smaller.
Resistance to soldering heat	260°C 10 seconds
Resistance to solvent	Conforms to MIL-STD-202E

TEMPERATURE CHARACTERISTICS



ORDERING INFORMATION

WICF1210	- 221	K	T	F=ROHS/Lead Free Packing
Type	Inductance Symbol (three digit)	Tolerance K: ±10% M: ±20%		B: Bulk Pack T: Tape & Reel

TAPE PACKAGING

Size	Qty/Reel
WICF1008	2,000
WICF1210	2,000
WICF1812	500

WOUND SHIELDED INDUCTOR CHIPS — TYPE WICF

WICF1008 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (μH)	Inductance Symbol	Q min.	L,Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	I _{dc} (mA) max.
WICF1008-1R0MT	1.0	1R0	10	7.96	100	0.13	455
WICF1008-1R5MT	1.5	1R5	10	7.96	80	0.17	350
WICF1008-2R2MT	2.2	2R2	10	7.96	70	0.20	315
WICF1008-3R3MT	3.3	3R3	10	7.96	55	0.25	280
WICF1008-4R7MT	4.7	4R7	10	7.96	45	0.30	210
WICF1008-6R8MT	6.8	6R8	10	7.96	38	0.35	175
WICF1008-100KT	10	100	20	2.52	32	0.50	155
WICF1008-150KT	15	150	20	2.52	28	0.75	130
WICF1008-220KT	22	220	20	2.52	16	1.60	105
WICF1008-330KT	33	330	20	2.52	14	2.10	85
WICF1008-470KT	47	470	20	2.52	11	2.60	60
WICF1008-680KT	68	680	20	2.52	10	3.30	50
WICF1008-101KT	100	101	20	0.796	8	5.50	40

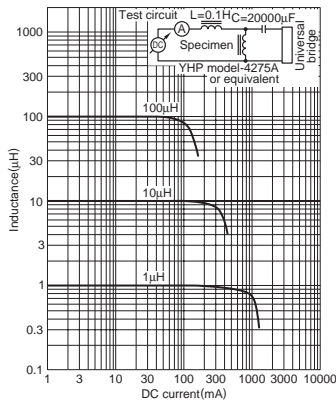
Inductance and Q are measured with a Q-meter.

WICF1210 ELECTRICAL SPECIFICATIONS

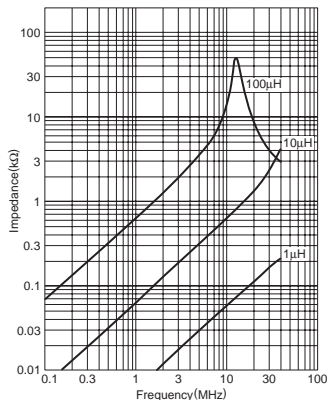
SMEC Part No.	Inductance (μH)	Inductance Symbol	Q min.	L,Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	I _{dc} (mA) max.
WICF1210-1R0MT	1.0	1R0	5	7.96	100	0.06	1250
WICF1210-1R5MT	1.5	1R5	5	7.96	80	0.08	1100
WICF1210-2R2MT	2.2	2R2	5	7.96	68	0.09	1000
WICF1210-3R3MT	3.3	3R3	5	7.96	54	0.11	900
WICF1210-4R7MT	4.7	4R7	5	7.96	46	0.13	850
WICF1210-6R8MT	6.8	6R8	5	7.96	38	0.17	750
WICF1210-100KT	10	100	10	2.52	30	0.26	650
WICF1210-150KT	15	150	10	2.52	26	0.32	550
WICF1210-220KT	22	220	10	2.52	21	0.50	450
WICF1210-330KT	33	330	10	2.52	17	0.75	360
WICF1210-470KT	47	470	10	2.52	14	0.95	320
WICF1210-680KT	68	680	10	2.52	12	1.50	260
WICF1210-101KT	100	101	10	0.796	10	2.50	200
WICF1210-151KT	150	151	10	0.796	8	3.20	170
WICF1210-221KT	220	221	10	0.796	7	5.40	130
WICF1210-331KT	330	331	10	0.796	5	7.00	110
WICF1210-471KT	470	471	10	0.796	4	16.0	79
WICF1210-681KT	680	681	10	0.796	3	20.0	70
WICF1210-102KT	1000	102	10	0.252	2.4	24.0	63

Inductance and Q are measured with a Q-meter.

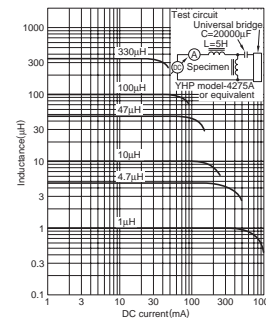
ELECTRICAL CHARACTERISTICS Inductance vs. Frequency Characteristics



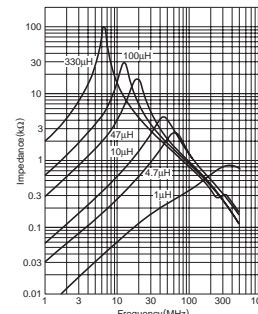
Impedance vs. Frequency Characteristics



ELECTRICAL CHARACTERISTICS Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics



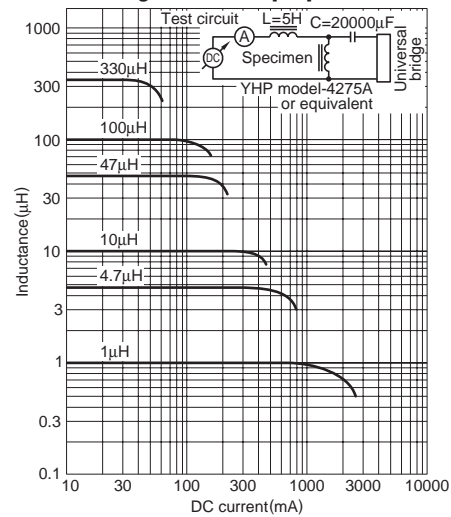
WOUND SHIELDED INDUCTOR CHIPS — TYPE WICF

WICF1812 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (μH)	Inductance Symbol	Q min.	L, Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	I _{dc} (mA) max.
WICF1812-1R0MT	1.0	1R0	10	7.96	200	0.05	1400
WICF1812-1R5MT	1.5	1R5	10	7.96	130	0.06	1200
WICF1812-2R2MT	2.2	2R2	10	7.96	80	0.07	1100
WICF1812-3R3MT	3.3	3R3	10	7.96	45	0.09	1050
WICF1812-4R7MT	4.7	4R7	10	7.96	35	0.10	1000
WICF1812-6R8MT	6.8	6R8	10	7.96	28	0.14	840
WICF1812-100KT	10.0	100	10	2.52	22	0.21	690
WICF1812-150KT	15.0	150	10	2.52	20	0.30	570
WICF1812-220KT	22.0	220	10	2.52	18	0.46	460
WICF1812-330KT	33.0	330	10	2.52	14	0.63	400
WICF1812-470KT	47.0	470	10	2.52	11.5	0.85	340
WICF1812-680KT	68.0	680	10	2.52	10.0	1.20	280
WICF1812-101KT	100	101	10	0.796	8.0	1.70	240
WICF1812-151KT	150	151	10	0.796	7.0	2.30	200
WICF1812-221KT	220	221	10	0.796	5.5	3.8	160
WICF1812-331KT	330	331	10	0.796	4.0	6.0	120

Inductance and Q are measured with a Q-meter.

ELECTRICAL CHARACTERISTICS Inductance Change vs. DC Superposition Characteristics



Impedance vs. Frequency Characteristics

