

## Miniature SMD Chip Open-Type Inductors (WB 1008 Type)

### OUTLINE

• Miniature SMD chip inductors have been designed especially for the need of today's high frequency designer. Their ceramic construction delivers the highest possible SRFs as well as excellent Q values. The non-magnetic coil form also assures the utmost in thermal stability, predictability, and batch consistency.

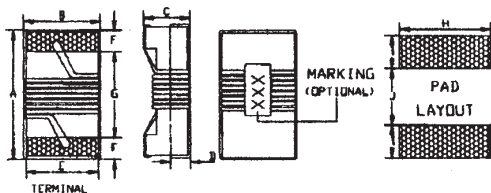
### OPERATING TEMPERATURE

- 55°C + 125°C
- 55°C + 85° C
- 1000MΩ (min)

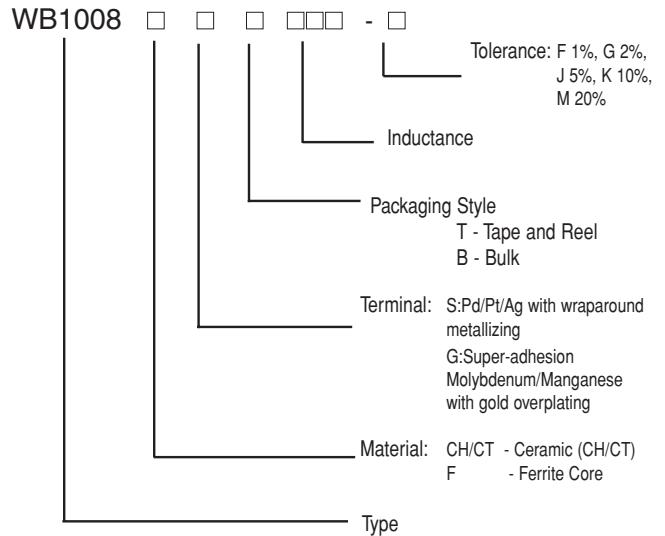
### RECOMMENDED APPLICATIONS

• Pager, cordless phone and high frequency communication products.

### SHAPES AND DIMENSIONS



### PRODUCT IDENTIFICATION



Unit in mm and inches

A (max)	B (max)	C (max)	D (ref)	E	F	G	H	I	J
2.92	2.79	2.23	0.51	2.03	0.51	1.52	2.54	1.02	1.27
0.115	0.110	0.087	0.020	0.080	0.020	0.060	0.100	0.040	0.050

Miniature SMD Chip Open-Type Inductors (WB1008 Type)

**ELECTRICAL CHARACTERISTICS**

Part No.	Inductance	Q (min)	F(MHZ)		SRF (MHZ) (min)	RDC ( $\Omega$ ) (max)	IDC (mA) (max)
			L	Q			
WB1008CH□□ 10N □	10.00 nH	50	50	500	4100	0.080	1000
WB1008CH□□ 12N □	12.00 nH	50	50	500	3300	0.090	1000
WB1008CH□□ 15N □	15.00 nH	50	50	500	2500	0.100	1000
WB1008CH□□ 18N □	18.00 nH	50	50	350	2500	0.110	1000
WB1008CH□□ 22N □	22.00 nH	55	50	350	2400	0.120	1000
WB1008CH□□ 27N □	27.00 nH	55	50	350	1600	0.130	1000
WB1008CH□□ 33N □	33.00 nH	60	50	350	1600	0.140	1000
WB1008CH□□ 39N □	39.00 nH	60	50	350	1500	0.150	1000
WB1008CH□□ 47N □	47.00 nH	65	50	350	1500	0.160	1000
WB1008CH□□ 56N □	56.00 nH	65	50	350	1300	0.180	1000
WB1008CH□□ 68N □	68.00 nH	65	50	350	1300	0.200	1000
WB1008CH□□ 82N □	82.00 nH	60	50	350	1000	0.220	1000
WB1008CH□□ R10 □	0.10 $\mu$ H	60	25	350	1000	0.560	650
WB1008CH□□ R12 □	0.12 $\mu$ H	60	25	350	950	0.630	650
WB1008CH□□ R15 □	0.15 $\mu$ H	45	25	100	850	0.700	580
WB1008CH□□ R18 □	0.18 $\mu$ H	45	25	100	750	0.770	620
WB1008CH□□ R22 □	0.22 $\mu$ H	45	25	100	700	0.840	500
WB1008CH□□ R27 □	0.27 $\mu$ H	45	25	100	600	0.910	500
WB1008CH□□ R33 □	0.33 $\mu$ H	45	25	100	570	1.050	450
WB1008CH□□ R39 □	0.39 $\mu$ H	45	25	100	500	1.120	470
WB1008CH□□ R47 □	0.47 $\mu$ H	45	25	100	450	1.190	470
WB1008CH□□ R56 □	0.56 $\mu$ H	45	25	100	415	1.330	400
WB1008CH□□ R62 □	0.62 $\mu$ H	45	25	100	375	1.400	300
WB1008CH□□ R68 □	0.68 $\mu$ H	45	25	100	375	1.470	400
WB1008CH□□ R75 □	0.75 $\mu$ H	45	25	100	360	1.540	360
WB1008CH□□ R82 □	0.82 $\mu$ H	45	25	100	350	1.610	400
WB1008CH□□ R91 □	0.91 $\mu$ H	45	25	50	320	1.680	380
WB1008CH□□ 1R0 □	1.00 $\mu$ H	35	25	50	290	1.750	370

Miniature SMD Chip Open-Type Inductors (WB1008 Type)

**ELECTRICAL CHARACTERISTICS**

WB1008F Series

Part No.	Inductance	Q (min)	F(MHZ)		SRF (MHZ) (min)	RDC ( $\Omega$ ) (max)	IDC (mA) (max)
			L	Q			
WB1008F □□ 1R2 □	1.20 $\mu$ H	37	7.9	7.9	210	0.680	650
WB1008F □□ 1R5 □	1.50 $\mu$ H	37	7.9	7.9	190	0.760	630
WB1008F □□ 1R8 □	1.80 $\mu$ H	37	7.9	7.9	170	0.840	600
WB1008F □□ 2R2 □	2.20 $\mu$ H	37	7.9	7.9	150	1.100	520
WB1008F □□ 2R7 □	2.70 $\mu$ H	37	7.9	7.9	135	1.280	490
WB1008F □□ 3R3 □	3.30 $\mu$ H	37	7.9	7.9	120	1.460	450
WB1008F □□ 3R9 □	3.90 $\mu$ H	37	7.9	7.9	105	1.560	420
WB1008F □□ 4R7 □	4.70 $\mu$ H	37	7.9	7.9	90	1.680	400
WB1008F □□ 5R6 □	5.60 $\mu$ H	37	7.9	7.9	80	1.820	380
WB1008F □□ 6R8 □	6.80 $\mu$ H	37	7.9	7.9	70	2.000	360
WB1008F □□ 8R2 □	8.20 $\mu$ H	37	7.9	7.9	65	2.650	330
WB1008F □□ 100 □	10.00 $\mu$ H	37	7.9	7.9	60	2.950	300

\*We are still developing from WB1008CH □□ 1R2 to 100 □ with ferrite material. These values are not available yet.

## Miniature SMD Chip Open-Type Inductors (WB 0805 Type)

### OUTLINE

• Our smallest wirebound inductors that ceramic body and wire wound construction provide the highest SRFs and  $Q$  values even at high frequencies available in WB 0805 size.

• These ultra-compact inductors also assure the utmost in thermal stability, predictability, and consistency.

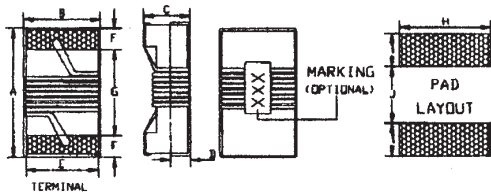
### OPERATING TEMPERATURE

- 55°C + 125°C
- 55°C + 85° C
- 1000MΩ (min)

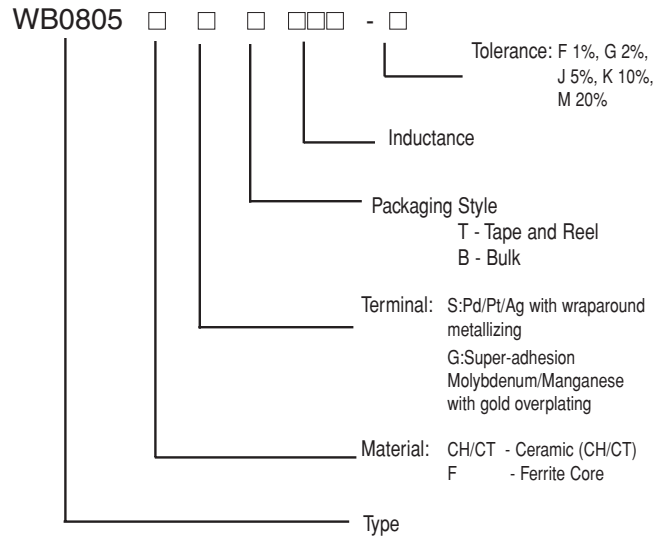
### RECOMMENDED APPLICATIONS

• Pager, cordless phone and high frequency communication products.

### SHAPES AND DIMENSIONS



### PRODUCT IDENTIFICATION



Unit in mm and inches

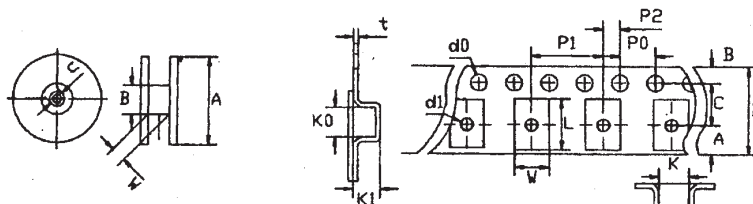
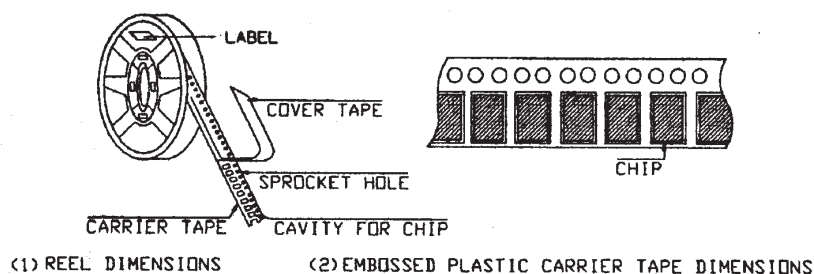
A (max)	B (max)	C (max)	D (ref)	E	F	G	H	I	J
2.16	1.52	1.52	0.51	1.27	0.51	1.02	1.78	1.02	0.76
0.085	0.060	0.060	0.020	0.050	0.020	0.040	0.070	0.040	0.030

Miniature SMD Chip Open-Type Inductors (WB0805 Type)

**ELECTRICAL CHARACTERISTICS**

Part No.	Inductance	Q (min)	F(MHZ)		SRF (MHZ) (min)	RDC ( $\Omega$ ) (max)	IDC (mA) (max)
			L	Q			
WB0805CH□□ 3N3 □	3.30 nH	50	250	1500	6000	0.080	600
WB0805CH□□ 6N8 □	6.80 nH	50	250	1000	5500	0.110	600
WB0805CH□□ 8N2 □	8.20 nH	50	250	500	4700	0.120	600
WB0805CH□□ 12N □	12.00 nH	50	250	500	4000	0.150	600
WB0805CH□□ 15N □	15.00 nH	50	250	500	3400	0.170	600
WB0805CH□□ 18N □	18.00 nH	50	250	500	3300	0.200	600
WB0805CH□□ 22N □	22.00 nH	55	250	500	2600	0.220	500
WB0805CH□□ 27N □	27.00 nH	55	250	500	2500	0.250	500
WB0805CH□□ 33N □	33.00 nH	60	250	500	2050	0.270	500
WB0805CH□□ 39N □	39.00 nH	60	250	500	2000	0.290	500
WB0805CH□□ 47N □	47.00 nH	60	200	500	1650	0.310	500
WB0805CH□□ 56N □	56.00 nH	60	200	500	1550	0.340	500
WB0805CH□□ 68N □	68.00 nH	60	200	500	1450	0.380	500
WB0805CH□□ 82N □	82.00 nH	65	150	500	1300	0.420	400
WB0805CH□□ R10 □	0.10 $\mu$ H	65	150	500	1200	0.460	400
WB0805CH□□ R12 □	0.12 $\mu$ H	50	150	250	1100	0.510	400
WB0805CH□□ R15 □	0.15 $\mu$ H	50	100	250	920	0.560	400
WB0805CH□□ R18 □	0.18 $\mu$ H	50	100	250	870	0.640	400
WB0805CH□□ R22 □	0.22 $\mu$ H	50	100	250	850	0.700	400

## Packaging Specification for SMD Chip Open-Type Inductors



### SPECIFICATIONS OF REEL & PACKING UNIT

Unit in mm

Part Number	Dimensions of Reel			Packing Unit		
	A	B	C	W	Φ180mm	Φ330mm
WB1008	180 / 330	62.0±1.50	12.75±0.15	10.0	2,000	
WB0805	180 / 330	62.0±1.50	12.75±0.15	10.0	3,000	

### DIMENSIONS OF EMBOSSED PLASTIC CARRIER TAPE

Unit in mm

Symbol	WB1008	WB0805
A	2.75	2.75
B	1.75±0.10	1.75±0.10
C	3.50±0.05	3.50±0.05
D	8.00±0.20	8.00±0.20
K	3.10±0.10	2.20±0.10
K0	3.20±0.10	2.70±0.10
K1	2.24±0.05	1.40±0.10
L	3.50	2.85
W	3.30	2.35
PO	4.00±0.10	4.00±0.10
P1	4.00±0.10	4.00±0.10
P2	2.00±0.05	2.00±0.05
d0	1.50+0.10 -0.00	1.50+0.10 -0.00
d1	1.10±0.10	1.10±0.10
t	0.30±0.05	0.20±0.05