

SERIES: FCBA1-1008 | DESCRIPTION: MINIATURE SMD CHIP INDUCTORS

FEATURES

- Ceramic construction with high SRF & Q values
- Non-magnetic coil form assures thermal stability & predictability
- Ferrite core construction provides lower DCR & higher current values
- Suitable for high frequency electronic applications

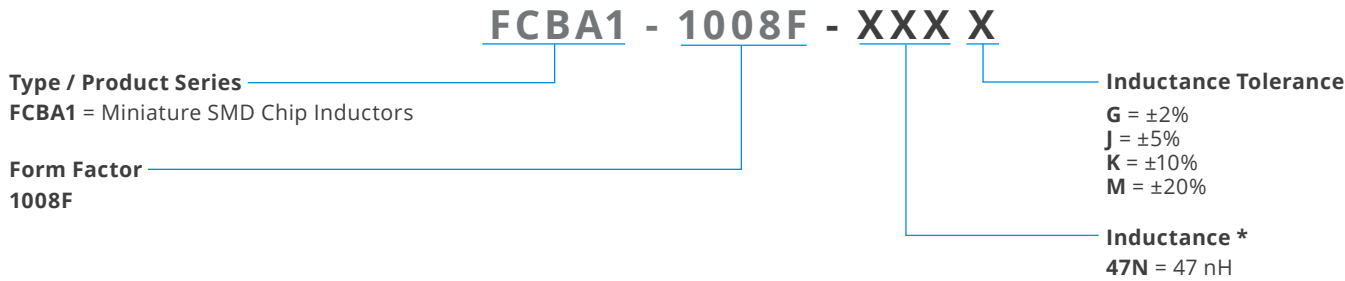


MODEL	Inductance L	Test Frequency L	Tolerance	Q	Test Frequency Q	SRF	DC Resistance	Rated Current
	[nH]	[MHz]	[±%]	min	[MHz]	min [MHz]	max [Ω]	max [mA]
FCBA1-1008F-3N9J	3.9	50	5, 10	50	1500	6000	0.035	1000
FCBA1-1008F-4N7J	4.7	50	5, 10	50	1500	6000	0.045	1000
FCBA1-1008F-5N6J	5.6	50	5, 10	30	1000	6000	0.18	1000
FCBA1-1008F-10NJ	10	50	2, 5, 10	50	500	4100	0.08	1000
FCBA1-1008F-12NJ	12	50	2, 5, 10	50	500	3300	0.09	1000
FCBA1-1008F-15NJ	15	50	2, 5, 10	45	500	2500	0.15	1000
FCBA1-1008F-18NJ	18	50	2, 5, 10	50	350	2500	0.11	1000
FCBA1-1008F-22NJ	22	50	2, 5, 10	55	350	2400	0.12	1000
FCBA1-1008F-27NJ	27	50	2, 5, 10	55	350	1600	0.13	1000
FCBA1-1008F-33NJ	33	50	2, 5, 10	60	350	1600	0.14	1000
FCBA1-1008F-36NJ	36	50	2, 5, 10	60	350	1550	0.14	1000
FCBA1-1008F-39NJ	39	50	2, 5, 10	60	350	1500	0.15	1000
FCBA1-1008F-47NJ	47	50	2, 5, 10	65	350	1500	0.16	1000
FCBA1-1008F-56NJ	56	50	2, 5, 10	65	350	1100	0.18	1000
FCBA1-1008F-68NJ	68	50	2, 5, 10	65	350	1000	0.20	1000
FCBA1-1008F-82NJ	82	50	2, 5, 10	60	350	1000	0.22	1000
FCBA1-1008F-91NJ	91	50	2, 5, 10	60	350	1000	0.30	1000
FCBA1-1008F-R10J	100	25	2, 5, 10	60	350	1000	0.56	650
FCBA1-1008F-R12J	120	25	2, 5, 10	60	350	950	0.63	650
FCBA1-1008F-R15J	150	25	2, 5, 10	45	100	800	0.70	580
FCBA1-1008F-R18J	180	25	2, 5, 10	45	100	640	0.77	620
FCBA1-1008F-R22J	220	25	2, 5, 10	45	100	620	0.84	500
FCBA1-1008F-R27J	270	25	2, 5, 10	45	100	600	0.91	500
FCBA1-1008F-R33J	330	25	2, 5, 10	45	100	500	1.05	450
FCBA1-1008F-R36J	360	25	2, 5, 10	45	100	480	1.10	450
FCBA1-1008F-R39J	390	25	2, 5, 10	45	100	480	1.12	450
FCBA1-1008F-R47J	470	25	2, 5, 10	45	100	450	1.19	450
FCBA1-1008F-R56J	560	25	2, 5, 10	45	100	415	1.33	400
FCBA1-1008F-R68J	680	25	2, 5, 10	45	100	375	1.47	400

FCBA1-1008F-R82J	820	25	2, 5, 10	45	100	250	1.61	400
FCBA1-1008F-1R0J	1000	25	2, 5, 10	35	50	210	1.75	370
FCBA1-1008F-1R5J	1500	7.9	2, 5, 10	28	50	180	2.30	330
FCBA1-1008F-1R8J	1800	7.9	2, 5, 10	28	50	160	2.60	300
FCBA1-1008F-2R2J	2200	7.9	2, 5, 10	20	50	90	2.80	280
FCBA1-1008F-2R7J	2700	7.9	2, 5, 10	22	25	80	3.20	280
FCBA1-1008F-3R3J	3300	7.9	2, 5, 10	22	25	70	3.40	280
FCBA1-1008F-3R9J	3900	7.9	2, 5, 10	16	25	60	3.60	260
FCBA1-1008F-4R3J	4300	7.9	2, 5, 10	18	25	60	3.80	260
FCBA1-1008F-4R7J	4700	7.9	5, 10	18	25	60	4.00	260
FCBA1-1008F-5R6J	5600	7.9	5, 10	18	7.9	55	7.60	240
FCBA1-1008F-6R8J	6800	7.9	5, 10	18	7.9	50	8.20	200
FCBA1-1008F-8R2J	8200	7.9	5, 10	18	7.9	40	8.20	170
FCBA1-1008F-100J	10000	7.9	5, 10	20	7.9	40	9.10	160

- Notes:
- 1. Electrical specifications measured at 25°C
 - 2. Rated Current - The current when the coil temperature increases up to max. $\Delta T = 15^{\circ}\text{C}$ ($T_A = 20^{\circ}\text{C}$)
 - 3. Operating Temperature: -40°C to 125°C

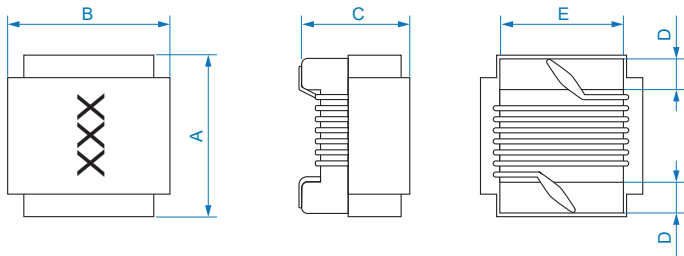
PART NUMBER KEY



* Note: Inductance expressed by three figures. The unit is micro henry (nH). The first and second figures are significant digits, the third figure expresses the number of zeros which follow the two figures. If there is a decimal point, it is expressed by the capital letter "N" (3N9 = 3.9 nH). In that case, all figures are significant digits.

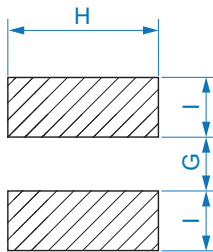
MECHANICAL DRAWING

Units: mm



PAD LAYOUT

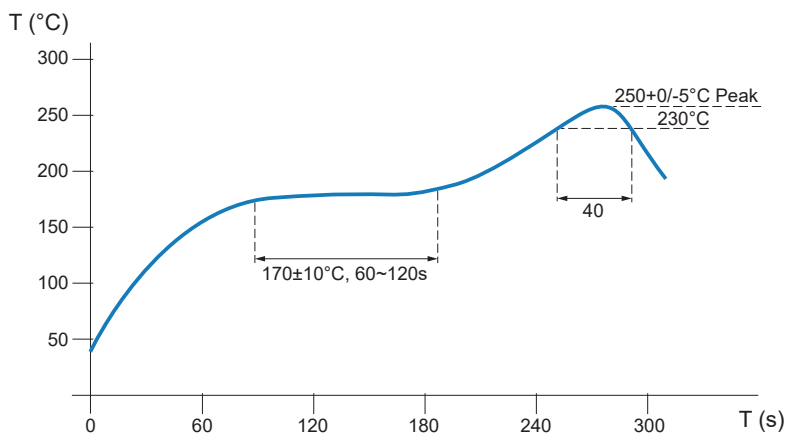
Units: mm



MECHANICAL DIMENSIONS (mm)

Product Series	A max	B max	C max	D	E	G	H	I
FCBA1-1008	2.92	2.79	2.10	0.51	2.03	1.27	2.54	1.02

RECOMMENDED REFLOW SOLDERING CONDITIONS

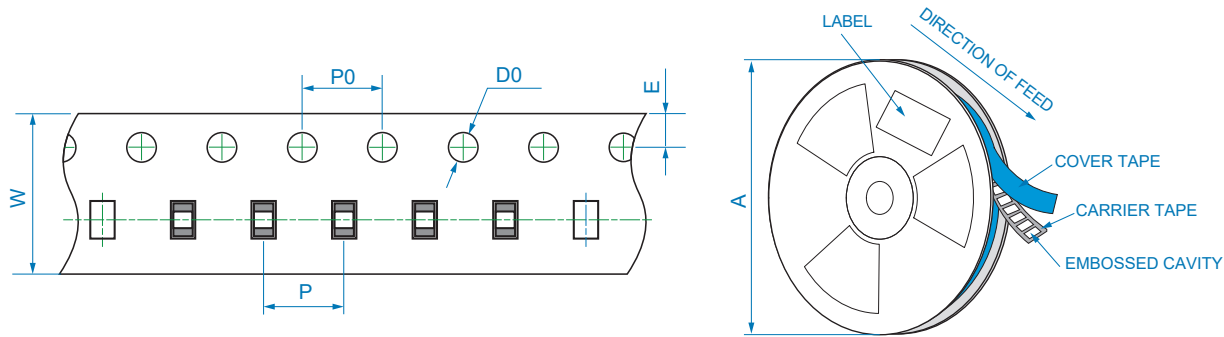


The recommended reflow conditions are set according to the soldering equipment used. Since various manufactures may have different reflow soldering equipment, products, process conditions, set methods, etc., when setting the reflow conditions, please adjust and confirm according to users' environment/equipment.

- Notes:
- a) Solder reflow temperature: +250°C max. for maximum 10 seconds
 - b) It is not recommended to solder inductors by soldering iron
 - c) Please contact us for details

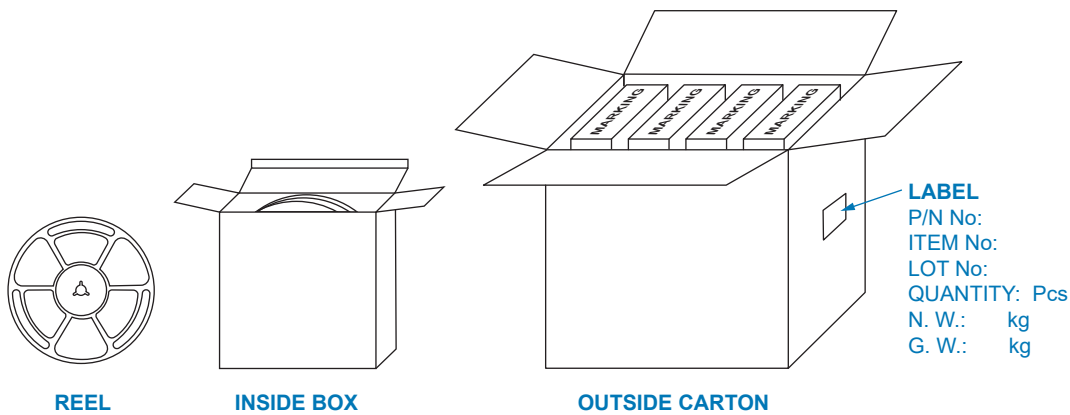
QUANTITY PER REEL & PACKING INFORMATION

Units: mm



TAPE DIMENSIONS (mm)

Product Series	W	P	P0	D0	E	A
FCBA1-1008	8.0	2.0	4.0	1.5	1.75	178



QUANTITY PER PACKAGE

Product Series	Pcs per Reel	Pcs per Inside Box	Pcs per Outside Carton
FCBA1-1008	2000	10000	120000

Storage Conditions

- a) Temperature conditions: <35°C.
- b) Humidity conditions between 35% - 65%.
- c) Moisture Sensitivity Level (MSL): Level 1.
- d) Storage of material to be in a sulfur and chlorine free environment.

REVISION HISTORY

Rev.	Description	Date
1	Initial release.	May/24/2024
A	Nuclear and medical disclaimers removed.	Jul/17/2026

TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

