

Data Sheet

Customer:

Product: Multilayer Chip Beads – CBF Series

Sizes.: 0402/0603/0805/1204/1210/1808/1812

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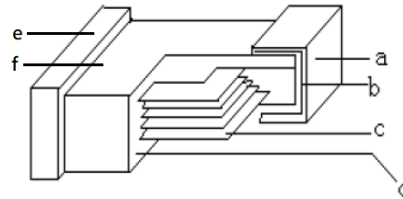
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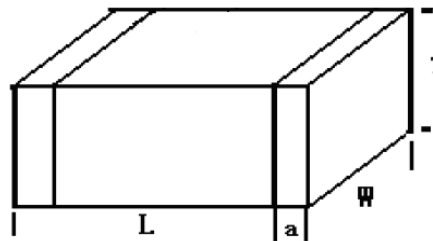
Multilayer Chip Beads
Multilayer Chip Beads

Construction



a	Ni/Sn Plating	d	Body
b	Ag Layer	e	Terminal Electrode
c	Inner Electrode	f	Ferrite

Dimensions



Type	Size (Inch)	L (mm)	W (mm)	T (mm)	a (mm)
CBF02	0402	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.10
CBF03	0603	1.6±0.20	0.8±0.20	0.8±0.20	0.3±0.20
CBF05	0805	2.0±0.20	1.2±0.20	0.9±0.20	0.5±0.30
CBF04	1204	3.2±0.20	1.6±0.20	0.9±0.20	0.5±0.30
CBF10	1210	3.2±0.20	2.5±0.20	1.3±0.20	0.5±0.30
CBF08	1808	4.5±0.20	1.6±0.20	1.6±0.20	0.5±0.30
CBF12	1812	4.5±0.20	3.2±0.20	1.5±0.20	0.5±0.30

Part Numbering

CBF	03	Y	T	U	M	101	-1
Product Type	Dimensions	Impedance Tolerance	Packaging Code	Material Code	Current	Impedance	Special
	02: 0402 03: 0603 05: 0805 04: 1204 10: 1210 08: 1808 12: 1812	- : see Electrical Specifications Y: ±25%	T: Taping Reel	U: U material	N: General Current H: Large current M: Ultra-High Current	110: 11Ω 101: 100Ω 102: 1000Ω	

Multilayer Chip Beads

■ Standard Electrical Specifications

CBF02(100505) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF02-TUN000	0	0-15Ω	100	50	0.05	500
CBF02-TUN050	5	0-15Ω	100	50	0.05	500
CBF02-TUN070	7	0-11Ω	100	50	0.05	500
CBF02-TUN090	9	5-13Ω	100	50	0.05	500
CBF02-TUN110	11	7-15Ω	100	50	0.05	500
CBF02-TUN150	15	9-21Ω	100	50	0.05	500
CBF02-TUN190	19	12-25Ω	100	50	0.10	300
CBF02YTUN260	26	±25%	100	50	0.13	300
CBF02YTUN310	31	±25%	100	50	0.20	300
CBF02YTUN600	60	±25%	100	50	0.30	200
CBF02YTUN800	80	±25%	100	50	0.35	200
CBF02YTUN101	100	±25%	100	50	0.35	200
CBF02YTUN121	120	±25%	100	50	0.40	200
CBF02YTUN151	150	±25%	100	50	0.47	200
CBF02YTUN201	200	±25%	100	50	0.52	150
CBF02YTUN221	220	±25%	100	50	0.52	150
CBF02YTUN301	300	±25%	100	50	0.65	100
CBF02YTUN501	500	±25%	100	50	0.90	100
CBF02YTUN601	600	±25%	100	50	1.00	100
CBF02YTUN801	800	±25%	100	50	1.30	100
CBF02YTUN102	1000	±25%	100	50	1.40	100

CBF03(160808) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF03-TUN000	0	0-15Ω	100	50	0.05	2000
CBF03-TUN050	5	0-15Ω	100	50	0.05	2000
CBF03-TUN070	7	0-11Ω	100	50	0.05	2000
CBF03-TUN090	9	5-13Ω	100	50	0.05	2000
CBF03-TUN110	11	7-15Ω	100	50	0.05	2000
CBF03-TUN150	15	9-21Ω	100	50	0.05	2000
CBF03-TUN190	19	12-25Ω	100	50	0.05	2000
CBF03YTUN260	26	±25%	100	50	0.05	2000
CBF03YTUN310	31	±25%	100	50	0.05	1000
CBF03YTUN800	80	±25%	100	50	0.15	400
CBF03YTUN101	100	±25%	100	50	0.20	300
CBF03YTUN121	120	±25%	100	50	0.20	300
CBF03YTUN151	150	±25%	100	50	0.20	300
CBF03YTUN181	180	±25%	100	50	0.30	300
CBF03YTUN221	220	±25%	100	50	0.30	300
CBF03YTUN301	300	±25%	100	50	0.35	200
CBF03YTUN501	500	±25%	100	50	0.45	200
CBF03YTUN601	600	±25%	100	50	0.45	200
CBF03YTUN801	800	±25%	100	50	0.60	200
CBF03YTUN102	1000	±25%	100	50	0.60	200
CBF03YTUN122	1200	±25%	100	50	0.70	200
CBF03YTUN152	1500	±25%	100	50	0.70	200
CBF03YTUN182	1800	±25%	100	50	0.90	150
CBF03YTUN202	2000	±25%	100	50	1.10	150
CBF03YTUN222	2200	±25%	100	50	1.20	100
CBF03YTUN252	2500	±25%	100	50	1.30	50

Multilayer Chip Beads

Standard Electrical Specifications

CBF05(201209) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF05-TUN000	0	0-15Ω	100	50	0.04	2200
CBF05-TUN050	5	0-15Ω	100	50	0.04	2200
CBF05-TUN070	7	0-11Ω	100	50	0.04	2200
CBF05-TUN090	9	5-13Ω	100	50	0.04	2200
CBF05-TUN110	11	7-15Ω	100	50	0.04	2200
CBF05-TUN150	15	9-21Ω	100	50	0.04	2200
CBF05-TUN190	19	12-25Ω	100	50	0.04	2200
CBF05YTUN260	26	±25%	100	50	0.05	1500
CBF05YTUN310	31	±25%	100	50	0.05	1500
CBF05YTUN360	36	±25%	100	50	0.05	1500
CBF05YTUN600	60	±25%	100	50	0.10	1000
CBF05YTUN700	70	±25%	100	50	0.10	1000
CBF05YTUN800	80	±25%	100	50	0.10	1000
CBF05YTUN101	100	±25%	100	50	0.15	800
CBF05YTUN121	120	±25%	100	50	0.15	800
CBF05YTUN151	150	±25%	100	50	0.18	700
CBF05YTUN181	180	±25%	100	50	0.18	700
CBF05YTUN221	220	±25%	100	50	0.20	600
CBF05YTUN301	300	±25%	100	50	0.20	600
CBF05YTUN501	500	±25%	100	50	0.30	550
CBF05YTUN601	600	±25%	100	50	0.30	550
CBF05YTUN801	800	±25%	100	50	0.35	500
CBF05YTUN102	1000	±25%	100	50	0.35	500
CBF05YTUN122	1200	±25%	100	50	0.40	500
CBF05YTUN152	1500	±25%	100	50	0.40	500
CBF05YTUN202	2000	±25%	100	50	0.45	500
CBF05YTUN222	2200	±25%	100	50	0.45	500
CBF05YTUN252	2500	±25%	50	50	0.50	400
CBF05YTUN272	2700	±25%	50	50	0.60	200
CBF05YTUN302	3000	±25%	50	50	0.60	200

CBF04(321609) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF04-TUN000	0	0-15Ω	100	50	0.05	2200
CBF04-TUN050	5	0-15Ω	100	50	0.05	2200
CBF04-TUN070	7	0-11Ω	100	50	0.05	2200
CBF04-TUN090	9	5-13Ω	100	50	0.05	2000
CBF04-TUN110	11	7-15Ω	100	50	0.05	2000
CBF04-TUN150	15	9-21Ω	100	50	0.05	2000
CBF04-TUN190	19	12-25Ω	100	50	0.05	2000
CBF04YTUN260	26	±25%	100	50	0.05	2000
CBF04YTUN310	31	±25%	100	50	0.05	2000
CBF04YTUN600	60	±25%	100	50	0.10	1000
CBF04YTUN700	70	±25%	100	50	0.10	1000
CBF04YTUN800	80	±25%	100	50	0.10	1000
CBF04YTUN101	100	±25%	100	50	0.10	1000
CBF04YTUN121	120	±25%	100	50	0.10	1000
CBF04YTUN151	150	±25%	100	50	0.15	1000
CBF04YTUN181	180	±25%	100	50	0.15	1000
CBF04YTUN221	220	±25%	100	50	0.20	800
CBF04YTUN301	300	±25%	100	50	0.20	800
CBF04YTUN501	500	±25%	100	50	0.30	600
CBF04YTUN601	600	±25%	100	50	0.30	600
CBF04YTUN801	800	±25%	100	50	0.35	600
CBF04YTUN102	1000	±25%	100	50	0.35	600
CBF04YTUN122	1200	±25%	100	50	0.60	300
CBF04YTUN152	1500	±25%	50	50	0.60	300
CBF04YTUN182	1800	±25%	50	50	0.80	100
CBF04YTUN202	2000	±25%	50	50	1.00	100
CBF04YTUN252	2500	±25%	50	50	1.20	50
CBF04YTUN302	3000	±25%	50	50	1.50	50

Multilayer Chip Beads

Large Current Electrical Specifications

CBF02(100505) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF02-TUH000	0	0-15Ω	100	50	0.04	1800
CBF02-TUH050	5	0-15Ω	100	50	0.04	1800
CBF02-TUH070	7	0-11Ω	100	50	0.04	1800
CBF02-TUH090	9	5-13Ω	100	50	0.04	1800
CBF02-TUH110	11	7-15Ω	100	50	0.04	1800
CBF02-TUH150	15	9-21Ω	100	50	0.04	1800
CBF02-TUH190	19	12-25Ω	100	50	0.06	1800
CBF02YTUH260	26	±25%	100	50	0.06	1800
CBF02YTUH310	31	±25%	100	50	0.08	1800
CBF02YTUH600	60	±25%	100	50	0.13	1000
CBF02YTUH800	80	±25%	100	50	0.17	1000
CBF02YTUH101	100	±25%	100	50	0.20	900
CBF02YTUH121	120	±25%	100	50	0.25	700
CBF02YTUH151	150	±25%	100	50	0.25	700
CBF02YTUH201	200	±25%	100	50	0.30	700
CBF02YTUH221	220	±25%	100	50	0.30	700
CBF02YTUH301	300	±25%	100	50	0.40	400
CBF02YTUH501	500	±25%	100	50	0.60	300
CBF02YTUH601	600	±25%	100	50	0.60	300
CBF02YTUH801	800	±25%	100	50	0.80	250
CBF02YTUH102	1000	±25%	100	50	0.90	250

CBF03(160808) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF03-TUH000	0	0-15Ω	100	50	0.02	3000
CBF03-TUH050	5	0-15Ω	100	50	0.02	3000
CBF03-TUH070	7	0-11Ω	100	50	0.02	3000
CBF03-TUH090	9	5-13Ω	100	50	0.02	3000
CBF03-TUH110	11	7-15Ω	100	50	0.02	3000
CBF03-TUH150	15	9-21Ω	100	50	0.03	3000
CBF03-TUH190	19	12-25Ω	100	50	0.03	3000
CBF03YTUH260	26	±25%	100	50	0.03	3000
CBF03YTUH310	31	±25%	100	50	0.03	3000
CBF03YTUH800	80	±25%	100	50	0.10	1500
CBF03YTUH101	100	±25%	100	50	0.12	1400
CBF03YTUH121	120	±25%	100	50	0.14	1300
CBF03YTUH151	150	±25%	100	50	0.15	1200
CBF03YTUH181	180	±25%	100	50	0.15	1200
CBF03YTUH221	220	±25%	100	50	0.18	1200
CBF03YTUH301	300	±25%	100	50	0.20	1200
CBF03YTUH501	500	±25%	100	50	0.30	1000
CBF03YTUH601	600	±25%	100	50	0.30	1000
CBF03YTUH801	800	±25%	100	50	0.35	500
CBF03YTUH102	1000	±25%	100	50	0.40	500
CBF03YTUH122	1200	±25%	100	50	0.45	500
CBF03YTUH152	1500	±25%	100	50	0.55	400
CBF03YTUH182	1800	±25%	100	50	0.55	400
CBF03YTUH202	2000	±25%	100	50	0.60	400
CBF03YTUH252	2500	±25%	100	50	0.65	400

Multilayer Chip Beads

Large Current Electrical Specifications

CBF05(201209) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF05-TUH000	0	0-15Ω	100	50	0.02	3000
CBF05-TUH050	5	0-15Ω	100	50	0.02	3000
CBF05-TUH070	7	0-11Ω	100	50	0.02	3000
CBF05-TUH090	9	5-13Ω	100	50	0.02	3000
CBF05-TUH110	11	7-15Ω	100	50	0.02	3000
CBF05-TUH150	15	9-21Ω	100	50	0.02	3000
CBF05-TUH190	19	12-25Ω	100	50	0.02	3000
CBF05YTUH300	30	±25%	100	50	0.04	3000
CBF05YTUH310	31	±25%	100	50	0.04	3000
CBF05YTUH360	36	±25%	100	50	0.04	3000
CBF05YTUH600	60	±25%	100	50	0.05	3000
CBF05YTUH800	80	±25%	100	50	0.06	3000
CBF05YTUH101	100	±25%	100	50	0.08	2500
CBF05YTUH121	120	±25%	100	50	0.08	2500
CBF05YTUH151	150	±25%	100	50	0.10	2500
CBF05YTUH181	180	±25%	100	50	0.12	2000
CBF05YTUH201	200	±25%	100	50	0.12	2000
CBF05YTUH221	220	±25%	100	50	0.13	2000
CBF05YTUH301	300	±25%	100	50	0.13	2000
CBF05YTUH331	330	±25%	100	50	0.15	2000
CBF05YTUH501	500	±25%	100	50	0.22	1500
CBF05YTUH601	600	±25%	100	50	0.22	1500
CBF05YTUH801	800	±25%	100	50	0.25	1000
CBF05YTUH102	1000	±25%	100	50	0.25	1000
CBF05YTUH122	1200	±25%	100	50	0.28	800
CBF05YTUH202	2000	±25%	100	50	0.40	700
CBF05YTUH222	2200	±25%	100	50	0.40	700
CBF05YTUH252	2500	±25%	50	50	0.45	600

CBF04(321609) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF04-TUH000	0	0-15Ω	100	50	0.04	4000
CBF04-TUH050	5	0-15Ω	100	50	0.04	4000
CBF04-TUH070	7	0-11Ω	100	50	0.04	4000
CBF04-TUH090	9	5-13Ω	100	50	0.04	4000
CBF04-TUH110	11	7-15Ω	100	50	0.04	4000
CBF04-TUH150	15	9-21Ω	100	50	0.04	3000
CBF04-TUH190	19	12-25Ω	100	50	0.04	3000
CBF04YTUH260	26	±25%	100	50	0.04	3000
CBF04YTUH280	28	±25%	100	50	0.04	3000
CBF04YTUH300	30	±25%	100	50	0.04	3000
CBF04YTUH310	31	±25%	100	50	0.04	3000
CBF04YTUH500	50	±25%	100	50	0.04	3000
CBF04YTUH600	60	±25%	100	50	0.04	3000
CBF04YTUH700	70	±25%	100	50	0.07	3000
CBF04YTUH800	80	±25%	100	50	0.07	3000
CBF04YTUH101	100	±25%	100	50	0.07	3000
CBF04YTUH121	120	±25%	100	50	0.07	3000
CBF04YTUH151	150	±25%	100	50	0.10	2500
CBF04YTUH181	180	±25%	100	50	0.10	2500
CBF04YTUH221	220	±25%	100	50	0.11	2500
CBF04YTUH301	300	±25%	100	50	0.15	2000
CBF04YTUH501	500	±25%	100	50	0.20	2000
CBF04YTUH601	600	±25%	100	50	0.20	2000
CBF04YTUH801	800	±25%	100	50	0.25	2000
CBF04YTUH102	1000	±25%	100	50	0.25	2000
CBF04YTUH122	1200	±25%	100	50	0.35	1500
CBF04YTUH152	1500	±25%	50	50	0.45	500
CBF04YTUH182	1800	±25%	50	50	0.60	500
CBF04YTUH202	2000	±25%	50	50	0.70	300
CBF04YTUH252	2500	±25%	50	50	0.90	200
CBF04YTUH302	3000	±25%	50	50	0.90	200

Multilayer Chip Beads

Large Current Electrical Specifications

CBF10(322513) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF10-TUH110	11	7-15Ω	100	50	0.03	5000
CBF10-TUH150	15	9-21Ω	100	50	0.03	5000
CBF10-TUH190	19	12-25Ω	100	50	0.03	5000
CBF10YTUH260	26	±25%	100	50	0.03	5000
CBF10YTUH310	31	±25%	100	50	0.03	5000
CBF10YTUH600	60	±25%	100	50	0.03	5000
CBF10YTUH700	70	±25%	100	50	0.03	5000
CBF10YTUH800	80	±25%	100	50	0.03	5000
CBF10YTUH900	90	±25%	100	50	0.04	4000
CBF10YTUH121	120	±25%	100	50	0.06	4000
CBF10YTUH151	150	±25%	100	50	0.08	4000
CBF10YTUH301	300	±25%	100	50	0.08	3000
CBF10YTUH501	500	±25%	100	50	0.12	3000
CBF10YTUH601	600	±25%	100	50	0.18	2000
CBF10YTUH801	800	±25%	100	50	0.23	2000
CBF10YTUH102	1000	±25%	100	50	0.28	2000

CBF08(451616) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF08-TUH190	19	12-25Ω	100	50	0.015	6000
CBF08YTUH260	26	±25%	100	50	0.02	6000
CBF08YTUH310	31	±25%	100	50	0.02	6000
CBF08YTUH600	60	±25%	100	50	0.025	6000
CBF08YTUH750	75	±25%	100	50	0.04	6000
CBF08YTUH800	80	±25%	100	50	0.05	3000
CBF08YTUH900	90	±25%	100	50	0.06	3000
CBF08YTUH121	120	±25%	100	50	0.06	3000
CBF08YTUH151	150	±25%	100	50	0.06	3000
CBF08YTUH221	220	±25%	100	50	0.08	2000
CBF08YTUH301	300	±25%	100	50	0.09	2000
CBF08YTUH501	500	±25%	100	50	0.20	1500
CBF08YTUH601	600	±25%	100	50	0.20	1500

CBF12(453215) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF12YTUH260	26	±25%	100	50	0.02	5000
CBF12YTUH280	28	±25%	100	50	0.02	5000
CBF12YTUH300	30	±25%	100	50	0.02	5000
CBF12YTUH310	31	±25%	100	50	0.02	5000
CBF12YTUH380	38	±25%	100	50	0.02	5000
CBF12YTUH400	40	±25%	100	50	0.02	4000
CBF12YTUH500	50	±25%	100	50	0.02	4000
CBF12YTUH600	60	±25%	100	50	0.02	4000
CBF12YTUH700	70	±25%	100	50	0.02	4000
CBF12YTUH800	80	±25%	100	50	0.02	4000
CBF12YTUH900	90	±25%	100	50	0.02	4000
CBF12YTUH101	100	±25%	100	50	0.03	4000
CBF12YTUH121	120	±25%	100	50	0.03	4000
CBF12YTUH151	150	±25%	100	50	0.04	3500
CBF12YTUH181	180	±25%	100	50	0.06	3000
CBF12YTUH201	200	±25%	100	50	0.06	3000
CBF12YTUH221	220	±25%	100	50	0.06	2000
CBF12YTUH301	300	±25%	100	50	0.06	2000
CBF12YTUH401	400	±25%	100	50	0.08	1000
CBF12YTUH501	500	±25%	100	50	0.10	1000
CBF12YTUH601	600	±25%	100	50	0.10	1000

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CBF02(100505) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF02-TUM000	0	0-15Ω	100	50	0.02	2000
CBF02-TUM050	5	0-15Ω	100	50	0.02	2000
CBF02-TUM070	7	0-11Ω	100	50	0.02	2000
CBF02-TUM090	9	5-13Ω	100	50	0.02	2000
CBF02-TUM110	11	7-15Ω	100	50	0.02	2000
CBF02-TUM150	15	9-21Ω	100	50	0.02	2000
CBF02-TUM190	19	12-25Ω	100	50	0.035	1700
CBF02YTUM260	26	±25%	100	50	0.06	1500
CBF02YTUM300	30	±25%	100	50	0.06	1500
CBF02YTUM600	60	±25%	100	50	0.10	1300
CBF02YTUM101	100	±25%	100	50	0.15	1000
CBF02YTUM121	120	±25%	100	50	0.15	1000
CBF02YTUM151	150	±25%	100	50	0.20	700
CBF02YTUM201	200	±25%	100	50	0.25	700
CBF02YTUM221	220	±25%	100	50	0.28	700
CBF02YTUM301	300	±25%	100	50	0.30	600
CBF02YTUM501	500	±25%	100	50	0.40	500
CBF02YTUM601	600	±25%	100	50	0.50	500
CBF02YTUM801	800	±25%	100	50	0.65	300
CBF02YTUM102	1000	±25%	100	50	0.65	300

CBF03(160808) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF03-TUM000	0	0-15Ω	100	50	0.01	6000
CBF03-TUM050	5	0-15Ω	100	50	0.01	6000
CBF03-TUM070	7	0-11Ω	100	50	0.01	6000
CBF03-TUM090	9	5-13Ω	100	50	0.01	6000
CBF03-TUM110	11	7-15Ω	100	50	0.01	6000
CBF03-TUM150	15	9-21Ω	100	50	0.01	6000
CBF03-TUM190	19	12-25Ω	100	50	0.01	6000
CBF03YTUM260	26	±25%	100	50	0.03	4000
CBF03YTUM300	30	±25%	100	50	0.03	4000
CBF03YTUM600	60	±25%	100	50	0.04	3000
CBF03YTUM600-1	60	±25%	100	50	0.025	3500
CBF03YTUM750	75	±25%	100	50	0.06	2500
CBF03YTUM800	80	±25%	100	50	0.025	3500
CBF03YTUM101	100	±25%	100	50	0.06	2500
CBF03YTUM101-1	100	±25%	100	50	0.04	3000
CBF03YTUM121	120	±25%	100	50	0.065	2000
CBF03YTUM121-1	120	±25%	100	50	0.04	2000
CBF03YTUM151	150	±25%	100	50	0.07	1500
CBF03YTUM181	180	±25%	100	50	0.09	1500
CBF03YTUM181-1	180	±25%	100	50	0.07	2000
CBF03YTUM221	220	±25%	100	50	0.12	1500
CBF03YTUM221-1	220	±25%	100	50	0.09	2000
CBF03YTUM301	300	±25%	100	50	0.15	1500
CBF03YTUM301-1	300	±25%	100	50	0.15	2000
CBF03YTUM331	330	±25%	100	50	0.18	1300
CBF03YTUM501	500	±25%	100	50	0.18	1300
CBF03YTUM501-1	500	±25%	100	50	0.15	1500
CBF03YTUM601	600	±25%	100	50	0.18	1300
CBF03YTUM601-1	600	±25%	100	50	0.15	1500
CBF03YTUM801	800	±25%	100	50	0.30	800
CBF03YTUM801-1	800	±25%	100	50	0.20	1200
CBF03YTUM102	1000	±25%	100	50	0.35	700
CBF03YTUM102-1	1000	±25%	100	50	0.30	1000

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CBF05(201209) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF05-TUM000	0	0-15Ω	100	50	0.01	6000
CBF05-TUM050	5	0-15Ω	100	50	0.01	6000
CBF05-TUM070	7	0-11Ω	100	50	0.01	6000
CBF05-TUM090	9	5-13Ω	100	50	0.01	6000
CBF05-TUM110	11	7-15Ω	100	50	0.01	6000
CBF05-TUM150	15	9-21Ω	100	50	0.01	6000
CBF05-TUM190	19	12-25Ω	100	50	0.01	6000
CBF05YTUM300	30	±25%	100	50	0.01	6000
CBF05YTUM310	31	±25%	100	50	0.01	6000
CBF05YTUM500	50	±25%	100	50	0.03	4000
CBF05YTUM600	60	±25%	100	50	0.03	4000
CBF05YTUM800	80	±25%	100	50	0.04	4000
CBF05YTUM800-1	80	±25%	100	50	0.025	3500
CBF05YTUM101	100	±25%	100	50	0.025	3500
CBF05YTUM121	120	±25%	100	50	0.045	4000
CBF05YTUM151	150	±25%	100	50	0.05	3000
CBF05YTUM181	180	±25%	100	50	0.07	3000
CBF05YTUM181-1	180	±25%	100	50	0.05	3000
CBF05YTUM221	220	±25%	100	50	0.07	3000
CBF05YTUM221-1	220	±25%	100	50	0.05	3000
CBF05YTUM301	300	±25%	100	50	0.08	2500
CBF05YTUM301-1	300	±25%	100	50	0.05	3000
CBF05YTUM501	500	±25%	100	50	0.09	2500
CBF05YTUM501-1	500	±25%	100	50	0.09	2500
CBF05YTUM601	600	±25%	100	50	0.10	2000
CBF05YTUM601-1	600	±25%	100	50	0.09	2500
CBF05YTUM102	1000	±25%	100	50	0.12	1500
CBF05YTUM102-1	1000	±25%	100	50	0.11	2000
CBF05YTUM122	1200	±25%	100	50	0.18	1000

CBF04(321609) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF04-TUM000	0	0-15Ω	100	50	0.01	6000
CBF04-TUM050	5	0-15Ω	100	50	0.01	6000
CBF04-TUM070	7	0-11Ω	100	50	0.01	6000
CBF04-TUM090	9	5-13Ω	100	50	0.01	6000
CBF04-TUM110	11	7-15Ω	100	50	0.01	6000
CBF04-TUM150	15	9-21Ω	100	50	0.015	6000
CBF04-TUM190	19	12-25Ω	100	50	0.015	6000
CBF04YTUM260	26	±25%	100	50	0.015	6000
CBF04YTUM280	28	±25%	100	50	0.015	6000
CBF04YTUM300	30	±25%	100	50	0.015	6000
CBF04YTUM310	31	±25%	100	50	0.02	5000
CBF04YTUM500	50	±25%	100	50	0.02	5000
CBF04YTUM600	60	±25%	100	50	0.025	5000
CBF04YTUM700	70	±25%	100	50	0.035	4000
CBF04YTUM800	80	±25%	100	50	0.035	4000
CBF04YTUM121	120	±25%	100	50	0.035	4000
CBF04YTUM151	150	±25%	100	50	0.045	3000
CBF04YTUM221	220	±25%	100	50	0.055	3000
CBF04YTUM301	300	±25%	100	50	0.065	2500
CBF04YTUM501	500	±25%	100	50	0.08	2500
CBF04YTUM601	600	±25%	100	50	0.085	2200
CBF04YTUM801	800	±25%	100	50	0.11	2100
CBF04YTUM102	1000	±25%	100	50	0.12	2100

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CBF10(322513) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF10-TUM110	11	7-15Ω	100	50	0.02	6000
CBF10-TUM150	15	9-21Ω	100	50	0.02	6000
CBF10-TUM190	19	12-25Ω	100	50	0.02	6000
CBF10YTUM260	26	±25%	100	50	0.02	6000
CBF10YTUM310	31	±25%	100	50	0.02	6000
CBF10YTUM600	60	±25%	100	50	0.02	6000
CBF10YTUM700	70	±25%	100	50	0.02	6000
CBF10YTUM800	80	±25%	100	50	0.02	6000
CBF10YTUM900	90	±25%	100	50	0.03	5000
CBF10YTUM121	120	±25%	100	50	0.03	5000
CBF10YTUM151	150	±25%	100	50	0.03	5000
CBF10YTUM301	300	±25%	100	50	0.06	4000
CBF10YTUM501	500	±25%	100	50	0.10	4000
CBF10YTUM601	600	±25%	100	50	0.15	3000
CBF10YTUM801	800	±25%	100	50	0.20	2500
CBF10YTUM102	1000	±25%	100	50	0.23	2500

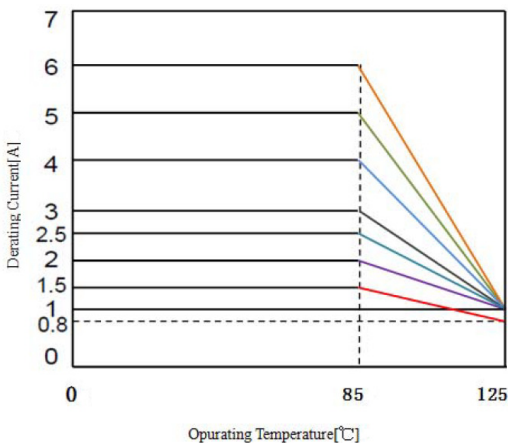
CBF08(451616) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF08-TUM190	19	12-25Ω	100	50	0.009	6000
CBF08YTUM260	26	±25%	100	50	0.009	6000
CBF08YTUM310	31	±25%	100	50	0.009	6000
CBF08YTUM600	60	±25%	100	50	0.009	6000
CBF08YTUM750	75	±25%	100	50	0.02	6000
CBF08YTUM800	80	±25%	100	50	0.02	3500

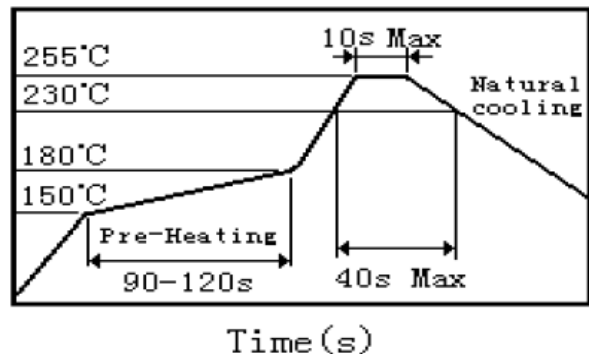
CBF12(453125) / U Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF12-TUM190	19	12-25Ω	100	50	0.01	6000
CBF12YTUM260	26	±25%	100	50	0.01	6000
CBF12YTUM280	28	±25%	100	50	0.01	6000
CBF12YTUM300	30	±25%	100	50	0.01	6000
CBF12YTUM310	31	±25%	100	50	0.01	6000
CBF12YTUM380	38	±25%	100	50	0.01	6000
CBF12YTUM400	40	±25%	100	50	0.01	6000
CBF12YTUM500	50	±25%	100	50	0.01	6000
CBF12YTUM600	60	±25%	100	50	0.01	6000
CBF12YTUM700	70	±25%	100	50	0.01	6000
CBF12YTUM101	100	±25%	100	50	0.02	6000
CBF12YTUM181	180	±25%	100	50	0.02	6000
CBF12YTUM221	220	±25%	100	50	0.02	6000
CBF12YTUM501	500	±25%	100	50	0.08	4000
CBF12YTUM601	600	±25%	100	50	0.08	4000

Curve

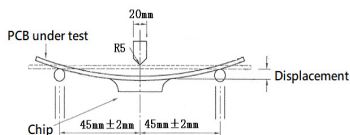
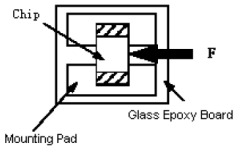
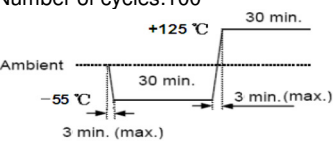


Recommend Soldering Conditions



Multilayer Chip Beads

■ Environmental Characteristics

Item	Specification	Test Methods
Operating Temperature Range	-55°C ~ 125°C	Includes product surface temperature rise.
Bending Strength	No mechanical damage.	Testing board : glass epoxy-resin substrate For 0.5mm/s compression speed, Curvature: 2mm, hold time 20±1s PCB thickness: 1.6±0.2mm or 0.8±0.1mm 
Vibration	No mechanical damage. Impedance change: within ±30%	Amplitude modulation: 1.5 mm Test time: A period of 2h in each of 3 mutually perpendicular directions. Frequency range: 10Hz to 55Hz to 10Hz for 1min.
Resistance to Soldering	At least 95% of terminal electrode should be covered with solder. No mechanical damage. Inductance: Impedance change: within ±30%	Preheating temperature: 120°C to 150°C Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder Solder temperature: 260±5°C Immersion tin depth: 10mm Duration: 10±1s Dip performance to a flux of about: 3~5s
Solder ability	At least 95% of terminal electrode should be covered with solder.	Preheating temperature: 120°C to 150°C Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder Solder temperature: 245±5°C Immersion tin depth: 10mm Duration: 5±1s Dip performance to a flux of about: 3~5s
Adhesion of Electrode	The termination and body should be no damage.	Applied force: 5N force for 0402 series; 7N force for 0603 series; 10N force for 0805 · 1206 series; 15N force for 1210 · 1808 · 1812 series. Keep time: 10±1s. 
Temperature Shock		Temperature: -55°C for 30±3min +125°C for 30±3min Number of cycles: 100 
Static Humidity	No mechanical damage Impedance change: within ±30%	Temperature: 60±2°C Humidity: 90 ~ 95%RH Testing Time: 1000+24/-0hrs
High Temperature Resistance		Temperature: 125±2°C Testing Time: 1000+24/-0hrs
Low Temperature Resistance		Temperature: -55±2°C Testing Time: 1000+24/-0hrs
High Temperature Load		Impose current: at room Testing Time: 1000+24/-0hrs Temperature: 85±2°C

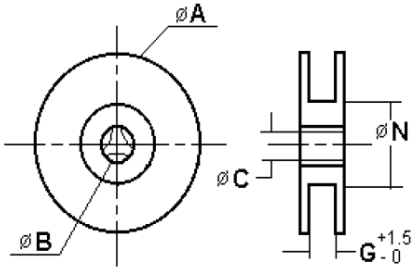
Note: When there are questions concerning, measurement shall be made after 24±2hrs of recovery under the standard condition.

■ Storage Temperature: -10 ~ 40°C ; Humidity: 30~70%RH

Multilayer Chip Beads

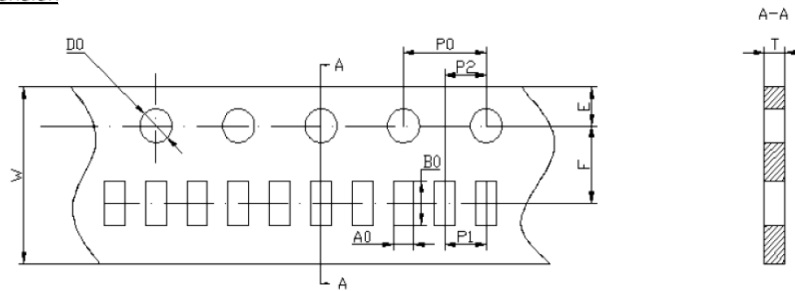
■Packaging

Reel Specifications & Dimension



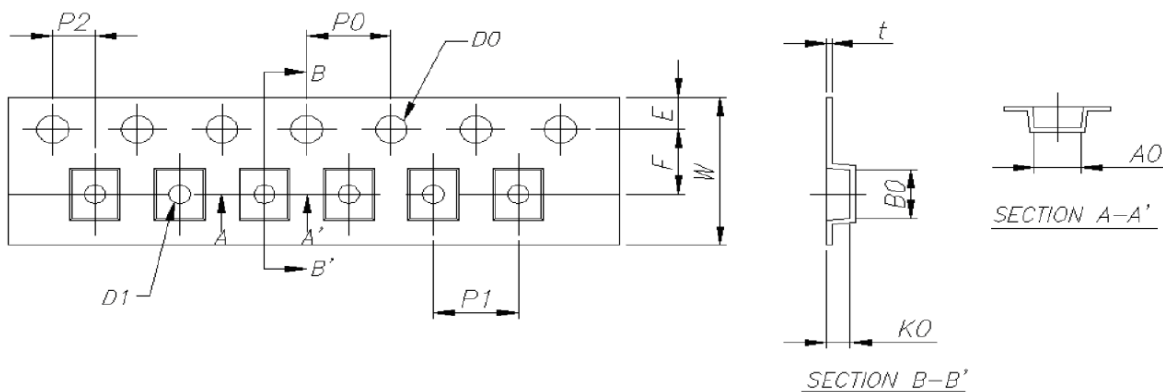
Reel Size	A (mm)	B (mm)	C (mm)	N (mm)	G (mm)
7"	178±2.0	22±2.0	12.5±1.5	57±2.0	8
13"	330±2.0	22±2.0	12.5±1.5	98±2.0	12

Paper Tape Specifications & Dimension



Type	A0 (mm)	B0 (mm)	W (mm)	F (mm)	E (mm)	P1 (mm)	P2 (mm)	P0 (mm)	D0 (mm)	T (mm)	Quantity (EA)
CBF02	0.65±0.1	1.15±0.1	8.0±0.2	3.5±0.1	1.75±0.2	2.0±0.1	2.0±0.1	4.0±0.2	1.55±0.1	0.60±0.1	10,000
CBF03	1.10±0.2	1.90±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1	4,000
CBF05	1.50±0.2	2.30±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1	4,000
CBF04	1.90±0.2	3.50±0.2	8.0±0.2	3.5±0.1	1.75±0.2	4.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1	4,000

Embossed Tape Specifications & Dimension



Type	W (mm)	E (mm)	F (mm)	D0 (mm)	D1 (mm)	P0 (mm)	P1 (mm)	P2 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	t (mm)	Quantity (EA)
CBF10	8.00 ±0.20	1.75 ±0.10	3.50 ±0.10	1.50 ±0.10	1.00 ±0.10	4.00 ±0.10	4.00 ±0.10	2.00 ±0.05	2.77 ±0.10	3.42 ±0.10	1.55 ±0.10	0.23 ±0.20	3,000
CBF08	12.00 ±0.20	1.75 ±0.10	5.50 ±0.10	1.50 ±0.10	1.50 ±0.10	4.00 ±0.10	4.00 ±0.10	2.00 ±0.10	1.93 ±0.10	4.95 ±0.10	1.93 ±0.10	0.24 ±0.20	5,000
CBF12	12.00 ±0.20	1.75 ±0.10	5.50 ±0.10	1.50 ±0.10	1.50 ±0.10	4.00 ±0.10	8.00 ±0.10	2.00 ±0.10	3.66 ±0.10	4.95 ±0.10	1.85 ±0.10	0.24 ±0.20	3,000