Data Sheet

Customer:	
Product:	**Multilayer Chip Beads – CBF Series**
Sizes.:	**0402/0603/0805/1204/1210/1808/1812**
Issued Date:	**31-Mar-25**
Edition:	**REV.A4**

RoHS Compliant

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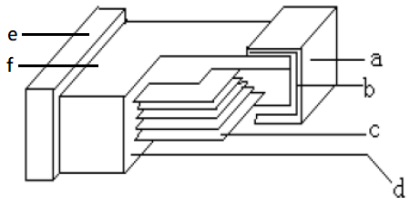
Produced by (QC)	Checked (QC)	Approved by (QC)	Prepared by (Sales)	Accepted by (Customer)
31-Mar-25	31-Mar-25	31-Mar-25	31-Mar-25	
Mandy Chang	*Ben Chang*	*Ben Chang*		

Multilayer Chip Beads

Multilayer Chip Beads

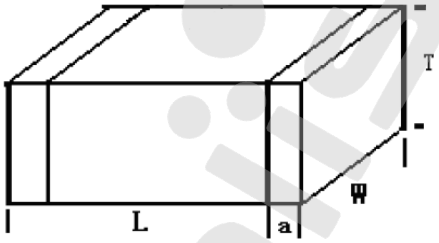
■Construction





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 X: X material B: B material D: D material P: P material	N: General Current H: Large current M: Ultra-High Current F: High Frequency	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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

■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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

■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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

■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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

Multilayer Chip Beads

■Ultra High 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-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
CBF03YTUM800-1	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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

Multilayer Chip Beads

■Ultra High 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-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	0.045	4000
CBF05YTUM101-1	100	±25%	100	50	0.025	3500
CBF05YTUM121	120	±25%	100	50	0.045	4000
CBF05YTUM151	150	±25%	100	50	0.07	3000
CBF05YTUM151-1	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
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
CBF05YTUM122-1	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

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

■Ultra High 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-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

CBF02(100505) / X Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF02YTXM100	10	±25%	100	50	0.018	3100
CBF02YTXM330	33	±25%	100	50	0.022	3000
CBF02YTXM600	60	±25%	100	50	0.032	2500
CBF02YTXM800	80	±25%	100	50	0.038	2300
CBF02YTXM121	120	±25%	100	50	0.050	2000
CBF02YTXM181	180	±25%	100	50	0.085	1600
CBF02YTXM221	220	±25%	100	50	0.095	1500
CBF02YTXM331	330	±25%	100	50	0.150	1200
CBF02YTXM471	470	±25%	100	50	0.200	1000
CBF02YTXM601	600	±25%	100	50	0.230	900

Multilayer Chip Beads

CBF03(160808) / X Material

Part No.	Impedance (Ω)	Tolerance	Test Frequency (MHz)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (mA) max.
CBF03YTXM220	22	±25%	100	50	0.010	6000
CBF03YTXM300	30	±25%	100	50	0.010	5000
CBF03YTXM700	70	±25%	100	50	0.020	4000
CBF03YTXM101	100	±25%	100	50	0.030	3000
CBF03YTXM121	120	±25%	100	50	0.025	3000
CBF03YTXM221	220	±25%	100	50	0.040	2500
CBF03YTXM331	330	±25%	100	50	0.070	1700
CBF03YTXM471	470	±25%	100	50	0.120	1500
CBF03YTXM601	600	±25%	100	50	0.150	1300
CBF03YTXM102	1000	±25%	100	50	0.200	1000

Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

■Standard Electrical Specifications(For High Frequency Line Use)

CBF02(100505) / B Material

Part No.	Impedance(Ω) (100MHz)	Tolerance	Impedance(Ω) (1GHz Min)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (A) max.
CBF02YTBF181	180	±25%	400	50	1.00	0.10
CBF02YTBF301	300	±25%	600	50	1.10	0.10
CBF02YTBF471	470	±25%	900	50	1.30	0.10
CBF02YTBF601	600	±25%	1100	50	0.85	0.30
CBF02YTBF102	1000	±25%	1200	50	1.25	0.25
CBF02YTBF152	1500	±25%	1400	50	2.20	0.05
CBF02YTBF182	1800	±25%	1620	50	2.20	0.20

CBF02(100505) / D Material

Part No.	Impedance(Ω) (100MHz)	Tolerance	Impedance(Ω) (1GHz Min)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (A) max.
CBF02YTDF221	220	±25%	300	50	0.50	0.30
CBF02YTDF301	300	±25%	400	50	1.00	0.10
CBF02YTDF601	600	±25%	700	50	1.50	0.10
CBF02YTDF102	1000	±25%	900	50	1.80	0.05

CBF02(100505) / P Material

Part No.	Impedance(Ω) (100MHz)	Tolerance	Impedance(Ω) (1GHz Min)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (A) max.
CBF02YTPF121	120	±25%	100	50	0.13	1.10
CBF02YTPF221	220	±25%	162	50	0.28	0.70

CBF03(160808) / B Material

Part No.	Impedance(Ω) (100MHz)	Tolerance	Impedance(Ω) (1GHz Min)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (A) max.
CBF03YTBF471	470	±25%	700	50	1.20	0.20
CBF03YTBF102	1000	±25%	750	50	0.90	0.15

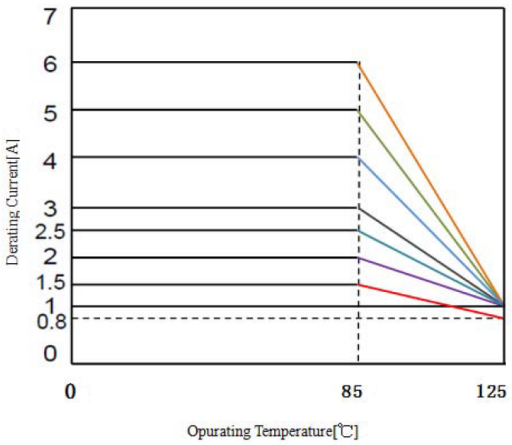
CBF03(160808) / P Material

Part No.	Impedance(Ω) (100MHz)	Tolerance	Impedance(Ω) (1GHz Min)	Test Voltage (mV)	RDC (Ω) max.	Rated Current (A) max.
CBF03YTPF221	220	±25%	300	50	0.12	1.20
CBF03YTPF331	330	±25%	380	50	0.15	0.90
CBF03YTPF601	600	±25%	500	50	0.25	0.80
CBF03YTPF102	1000	±25%	600	50	0.35	0.60
CBF03YTPF152	1500	±25%	900	50	0.50	0.50

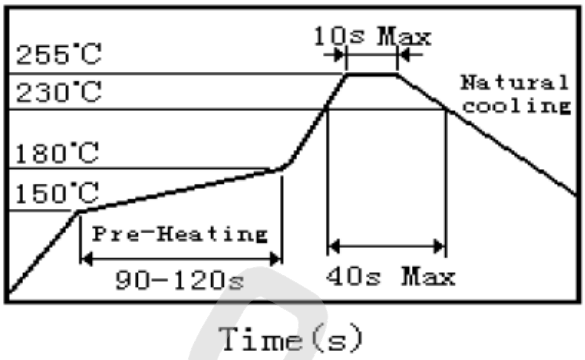
Note: When Operating temperatures exceed +85℃,derating of current is necessary for chip ferrite beads for which rated current is1A and over. Please apply the derating curve shown in chart according to the operating temperature

Multilayer Chip Beads

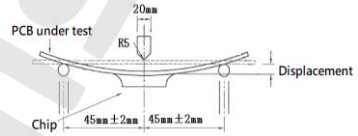
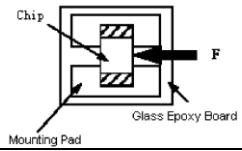
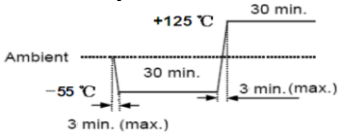
■Curve



■Recommend Soldering Conditions



■Environmental Characteristics

Item	Specification	Test Methods
Operating Temperature Range	-55℃ ~ 125℃	Includes product surface temperature rise.
Bending Strength	No mechanical damage.	Testing board : glass epoxy-resin substrate For 1±0.5 mm/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℃ to 150℃ Preheating time:60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder Solder temperature:260±5℃ 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℃ to 150℃ Preheating time:60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder Solder temperature:245±5℃ Immersion tin depth:10mm Duration: 3±0.3s 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	No mechanical damage Impedance change: within ±30%	Temperature: -55℃ for 30±3min +125℃ for 30±3min Number of cycles:100 

Multilayer Chip Beads

Item	Specification	Test Methods
Static Humidity		Temperature: 60±2℃ Humidity: 90 ~ 95%RH Testing Time: 1000+24/-0hrs
High Temperature Resistance		Temperature: 125±2℃ Testing Time: 1000+24/-0hrs
Low Temperature Resistance		Temperature: -55±2℃ Testing Time: 1000+24/-0hrs
High Temperature Load		Impose current: at room Testing Time: 1000+24/-0hrs Temperature: 85±2℃

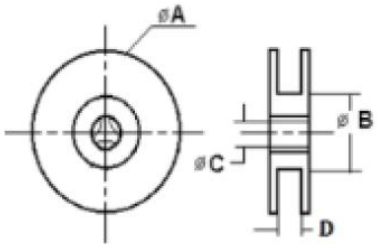
Note: When there are questions concerning, measurement shall be made after 24±2hrs of recovery under the standard condition.

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

■Shelf life: 6 months Max

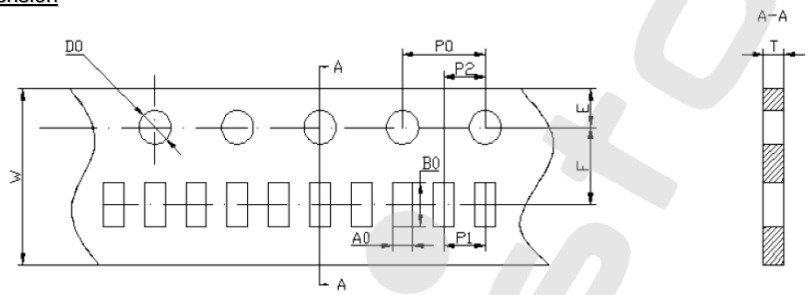
■Packaging

Reel Specifications & Dimension



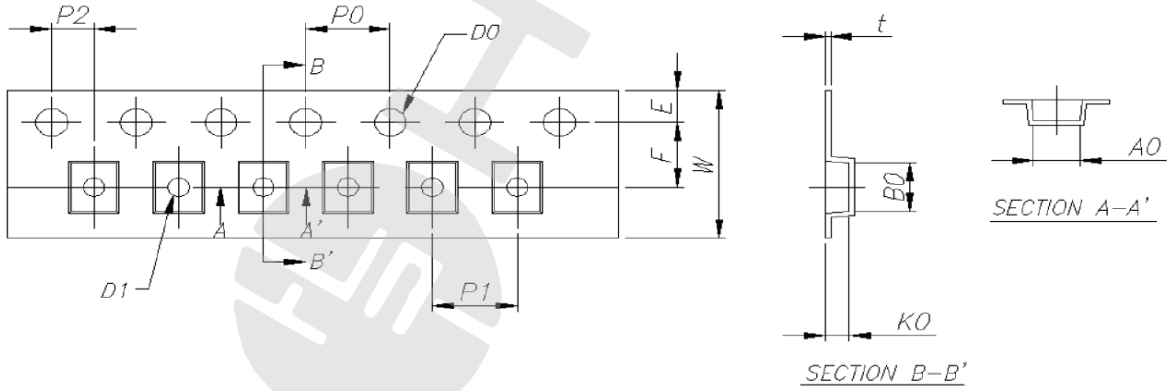
Reel Size	A (mm)	B (mm)	C (mm)	D (mm)
7”	178±2.0	60±2.0	13.0±1.0	9.5±2.0
13”	330±2.0	100±2.0	13.5±1.0	12.4±2.0

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	0.59±0.1	1.12±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	1.05±0.2	1.85±0.2	8.0±0.2	3.5±0.1	1.75±0.2	2.0±0.2	2.0±0.1	4.0±0.2	1.55±0.1	0.95±0.1	4,000
CBF05	1.45±0.2	2.35±0.2	8.0±0.2	3.5±0.1	1.75±0.2	2.0±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

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version A4	Mar 31 ,2025		-Add High Frequency specifications for CBF02 and CBF03. -Add Shelf life.