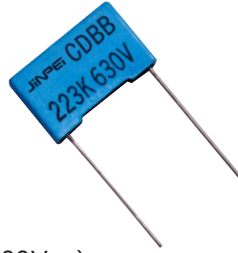


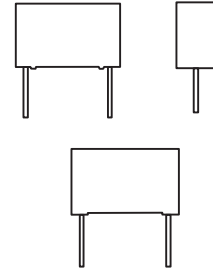


CDBB: High Frequency & Pulse

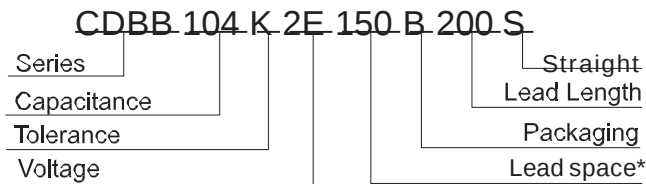


FEATURES

- ◆ High moisture resistance
- ◆ Rated voltage : 250~2000Vdc (180~700Vac)
- ◆ Capacitance range : 0.00022 ~3.9 uF
- ◆ Flame-retardant epoxy resin (Compliant to UL 94V-0)
- ◆ RoHS Compliant and lead-free terminations
- ◆ For high dv/dt application



PART NUMBER EXAMPLE

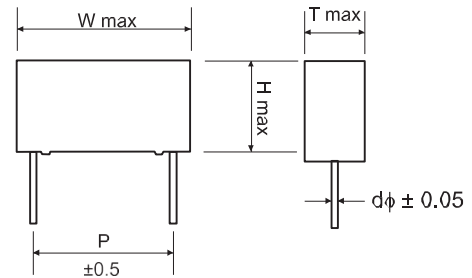
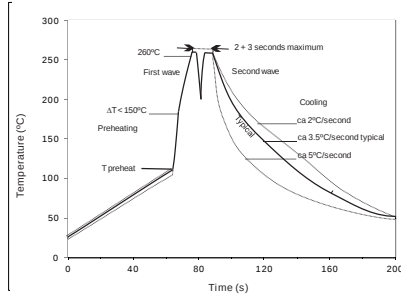


* Leadspace is straight lead non-formed original leadspace.

ELECTRICAL CHARACTERISTICS

Items	Performance			
Operating Voltage Range	250Vdc ~ 2,000Vdc			
Rated Temperature	-40°C ~ +105°C (Derates over 85°C at 1.25% per °C)			
Climatic Category	40 / 105 / 56			
Capacitance Range	0.00022 μF ~ 3.9 μF			
Capacitance Tolerance	±5% (J), ±10% (K), other tolerances on request			
Dissipation Factor (tan δ)		C ≤0.1μF	0.1μF < C ≤1.0μF	C > 1.0μF
	1KHz, 20°C	0.0003	0.0003	0.0003
	1KHz, 20°C	0.0004	0.0006	---
	100KHz, 20°C	0.0015	---	---
Insulation Resistance	Measured at 20°C, 100Vdc for 1 minute			
	Minimum Value Between Terminals			
	Cr ≤ 0.33 μF		Ir ≥ 100,000 MΩ	
	Cr > 0.33 μF		Ir ≥ 30,000 MΩ • μF	
	Minimum Value Between Terminals and Case			
			Ir ≥ 30,000 MΩ	

Wave Soldering Recommendations



RATINGS & DIMENSIONS (mm)

(μF)	Working Voltage	250Vdc (2E)							400Vdc (2G)							630Vdc (2J)						
		180Vac							250Vac							400Vac						
		W	H	T	P	dø	dv/dt	W	H	T	P	dø	dv/dt	W	H	T	P	dø	dv/dt			
0.01	103															13.0	11.0	5.0	10.0	0.6	3,000	
0.012	123															13.0	11.0	5.0	10.0	0.6	3,000	
0.015	153															13.0	12.0	6.0	10.0	0.6	3,000	
0.018	183															18.0	11.0	5.0	15.0	0.8	2,500	
0.022	223															18.0	11.0	5.0	15.0	0.8	2,500	
0.027	273															13.0	11.0	5.0	10.0	0.6	1,400	18.0
0.033	333								13.0	11.0	5.0	10.0	0.6	1,400	18.0	12.0	6.0	15.0	0.8	2,500		
0.039	393								13.0	12.0	6.0	10.0	0.6	1,400	18.0	12.0	6.0	15.0	0.8	2,500		
0.047	473								13.0	11.0	5.0	10.0	0.6	1,000	18.0	11.0	5.0	15.0	0.8	1,000	18.0	12.0
0.056	563	13.0	11.0	5.0	10.0	0.6	1,000	18.0	11.0	5.0	15.0	0.8	1,000	26.5	15.0	6.0	22.5	0.8	1,800			
0.068	683	13.0	12.0	6.0	10.0	0.6	1,000	18.0	12.0	6.0	15.0	0.8	1,000	26.5	15.0	6.0	22.5	0.8	1,800			
0.082	823	18.0	11.0	5.0	15.0	0.8	600	18.0	12.0	6.0	15.0	0.8	1,000	26.5	15.0	6.0	22.5	0.8	1,800			
0.1	104	18.0	11.0	5.0	15.0	0.8	600	18.0	13.5	7.5	15.0	0.8	1,000	26.5	15.0	6.0	22.5	0.8	1,800			
0.12	124	18.0	12.0	6.0	15.0	0.8	600	18.0	13.5	7.5	15.0	0.8	1,000	26.5	16.0	7.0	22.5	0.8	1,800			
0.15	154	18.0	12.0	6.0	15.0	0.8	600	26.5	15.0	6.0	22.5	0.8	600	26.5	17.0	8.5	22.5	0.8	1,800			
0.18	184	18.0	13.5	7.5	15.0	0.8	600	26.5	15.0	6.0	22.5	0.8	600	32.0	18.0	9.0	27.5	0.8	1,100			
0.22	224	18.0	13.5	7.5	15.0	0.8	600	26.5	16.0	7.0	22.5	0.8	600	32.0	18.0	9.0	27.5	0.8	1,100			
0.27	274	18.0	14.5	8.5	15.0	0.8	600	26.5	17.0	8.5	22.5	0.8	600	32.0	18.0	9.0	27.5	0.8	1,100			
0.33	334	18.0	16.0	10.0	15.0	0.8	600	26.5	17.0	8.5	22.5	0.8	600	32.0	20.0	11.0	27.5	0.8	1,100			
0.39	394	26.5	16.0	7.0	22.5	0.8	400	26.5	18.5	10.0	22.5	0.8	600	32.0	20.0	11.0	27.5	0.8	1,100			
0.47	474	26.5	16.0	7.0	22.5	0.8	400	32.0	18.0	9.0	27.5	0.8	500	32.0	22.0	13.0	27.5	0.8	1,100			
0.56	564	26.5	17.0	8.5	22.5	0.8	400	32.0	20.0	11.0	27.5	0.8	500	32.0	22.0	13.0	27.5	0.8	1,100			
0.68	684	26.5	18.5	10.0	22.5	0.8	400	32.0	20.0	11.0	27.5	0.8	500	32.0	24.5	15.0	27.5	0.8	1,100			
0.82	824	26.5	18.5	10.0	22.5	0.8	400	32.0	22.0	13.0	27.5	0.8	500	32.0	28.0	14.0	27.5	0.8	1,100			
1	105	32.0	20.0	11.0	27.5	0.8	300	32.0	24.5	15.0	27.5	0.8	500	32.0	33.0	18.0	27.5	0.8	1,100			
1.2	125	32.0	20.0	11.0	27.5	0.8	300	32.0	24.5	15.0	27.5	0.8	500	32.0	33.0	18.0	27.5	0.8	1,100			
1.5	155	32.0	22.0	13.0	27.5	0.8	300	32.0	33.0	18.0	27.5	0.8	500	continue								
1.8	185	32.0	24.5	15.0	27.5	0.8	300	32.0	33.0	18.0	27.5	0.8	500									
2.2	225	32.0	24.5	15.0	27.5	0.8	300															
2.7	275	32.0	33.0	18.0	27.5	0.8	300															
3.3	335	32.0	33.0	18.0	27.5	0.8	300															
3.9	395	32.0	33.0	18.0	27.5	0.8	300															

continue

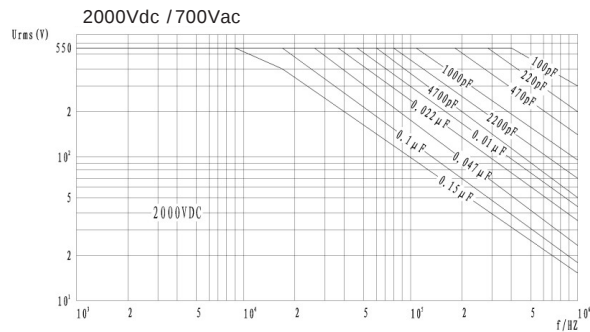
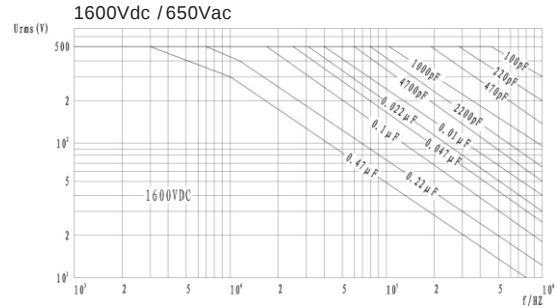
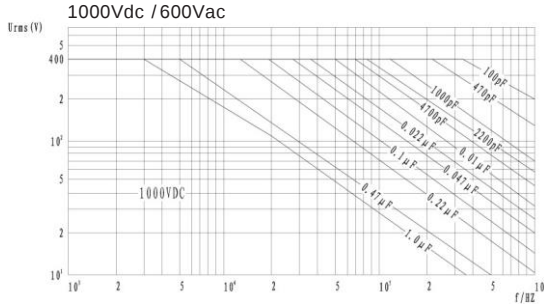
CDBB: High Frequency & Pulse



RATINGS & DIMENSIONS (mm)

(F)	Working Voltage	1000VDC (3A)						1600Vdc (3C)						2000Vdc (3D)					
		600Vac						650Vac						700Vac					
	Code	W	H	T	P	dø	dv/dt	W	H	T	P	dø	dv/dt	W	H	T	P	dø	dv/dt
0.00022	221													18.0	11.0	5.0	15.0	0.8	10,000
0.00027	271													18.0	11.0	5.0	15.0	0.8	10,000
0.00033	331													18.0	11.0	5.0	15.0	0.8	10,000
0.00047	471													18.0	11.0	5.0	15.0	0.8	10,000
0.00056	561													18.0	11.0	5.0	15.0	0.8	10,000
0.00068	681							18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.00082	821							18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.001	102							18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.0012	122							18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.0015	152							18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.0018	182	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000						
0.0022	222	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000						
0.0027	272	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000						
0.0033	332	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000						
0.0039	392	13.0	11.0	5.0	10.0	0.6	6,000	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.0047	472	13.0	11.0	5.0	10.0	0.6	6,000	18.0	11.0	5.0	15.0	0.8	6,000	18.0	11.0	5.0	15.0	0.8	10,000
0.0056	562	13.0	12.0	6.0	10.0	0.6	6,000	18.0	11.0	5.0	15.0	0.8	6,000	18.0	13.5	7.5	15.0	0.8	10,000
0.0068	682	13.0	12.0	6.0	10.0	0.6	6,000	18.0	11.0	5.0	15.0	0.8	6,000	18.0	13.5	7.5	15.0	0.8	10,000
0.0082	822	18.0	11.0	5.0	15.0	0.8	3,300	18.0	12.0	6.0	15.0	0.8	6,000	26.5	15.0	6.0	22.5	0.8	5,000
0.01	103	18.0	11.0	5.0	15.0	0.8	3,300	18.0	12.0	6.0	15.0	0.8	6,000	26.5	15.0	6.0	22.5	0.8	5,000
0.012	123	18.0	11.0	5.0	15.0	0.8	3,300	18.0	13.5	7.5	15.0	0.8	6,000	26.5	15.0	6.0	22.5	0.8	5,000
0.015	153	18.0	11.0	5.0	15.0	0.8	3,300	18.0	13.5	7.5	15.0	0.8	6,000	26.5	16.0	7.0	22.5	0.8	5,000
0.018	183	18.0	13.5	7.5	15.0	0.8	3,300	18.0	14.5	8.5	15.0	0.8	6,000	26.5	16.0	7.0	22.5	0.8	5,000
0.022	223	18.0	13.5	7.5	15.0	0.8	3,300	18.0	14.5	8.5	15.0	0.8	6,000	26.5	17.0	8.5	22.5	0.8	5,000
0.027	273	18.0	14.5	8.5	15.0	0.8	3,300	26.5	15.0	6.0	22.5	0.8	3,000	26.5	18.5	10.0	22.5	0.8	5,000
0.033	333	26.5	15.0	6.0	22.5	0.8	2,100	26.5	16.0	7.0	22.5	0.8	3,000	26.5	18.5	10.0	22.5	0.8	5,000
0.039	393	26.5	15.0	6.0	22.5	0.8	2,100	26.5	17.0	8.5	22.5	0.8	3,000	26.5	22.0	12.0	22.5	0.8	5,000
0.047	473	26.5	16.0	7.0	22.5	0.8	2,100	26.5	18.5	10.0	22.5	0.8	3,000	32.0	20.0	11.0	27.5	0.8	2,200
0.056	563	26.5	16.0	7.0	22.5	0.8	2,100	26.5	18.5	10.0	22.5	0.8	3,000	32.0	22.0	13.0	27.5	0.8	2,200
0.068	683	26.5	17.0	8.5	22.5	0.8	2,100	26.5	22.0	12.0	22.5	0.8	3,000	32.0	22.0	13.0	27.5	0.8	2,200
0.082	823	26.5	18.5	10.0	22.5	0.8	2,100	32.0	20.0	11.0	27.5	0.8	2,000	32.0	24.5	15.0	27.5	0.8	2,200
0.1	104	26.5	18.5	10.0	22.5	0.8	2,100	32.0	20.0	11.0	27.5	0.8	2,000	32.0	28.0	14.0	27.5	0.8	2,200
0.12	124	32.0	20.0	11.0	27.5	0.8	1,300	32.0	22.0	13.0	27.5	0.8	2,000	32.0	33.0	18.0	27.5	0.8	2,200
0.15	154	32.0	20.0	11.0	27.5	0.8	1,300	32.0	24.5	15.0	27.5	0.8	2,000	32.0	33.0	18.0	27.5	0.8	2,200
0.18	184	32.0	22.0	13.0	27.5	0.8	1,300	32.0	24.5	15.0	27.5	0.8	2,000						
0.22	224	32.0	22.0	13.0	27.5	0.8	1,300	32.0	33.0	18.0	27.5	0.8	2,000						
0.27	274	32.0	24.5	15.0	27.5	0.8	1,300	32.0	33.0	18.0	27.5	0.8	2,000						
0.33	334	32.0	28.0	14.0	27.5	0.8	1,300	32.0	33.0	18.0	27.5	0.8	2,000						
0.39	394	32.0	33.0	18.0	27.5	0.8	1,300												
0.47	474	32.0	33.0	18.0	27.5	0.8	1,300												

Vrms vs. Frequency, typical value



RADIAL TAPING CODE DIAGRAM

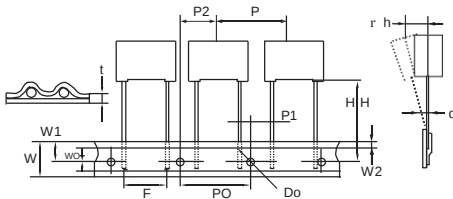


Fig. 4 Box or Epoxy Coated
F=10 = Ammo Only
F=15 Every other space skipped because of Larger body - Ammo Only (RT3 or RT4)

Description	Letter	Dimension (mm)	
		RT4	Tol.
Lead Wire Diameter	d	0.6 / 0.8	± 0.05
Tape Pitch	P	25.4	± 1
Feed Hole Pitch	PO	12.7	± 0.2
Centering of the Lead Wire	P1	5.2	± 0.7
Centering of the Body	P2	12.7	± 1.3
Lead Spacing (Pitch)	F	15	+ 0.6; -0.1
Component Alignment	Δh	0	± 2
Height of Component from Tape Center	H	18.5	± 0.5
Carrier Tape Width	W	18	+ 1; -0.5
Hold Down Tape Width	WO	10	Min
Hole Position	W1	9	± 0.5
Hold Down Tape Position	W2	3	Max
Feed Hole Diameter	Do	4	± 0.2
Tape Thickness	t	0.5	± 0.2
Figure	fig	4	

Remark: *Allowance of accumulated pitch less than 1mm at the sum of 20 pitches.

*Continuous empty component less than 3 consecutive pieces.

*Total empty on one reel less than 1%.