

BaTiO3(BT)		t=2.31 mm	d=10.56 mm	C_o		0.3355436378		
Frequency (kHz)	C_4 (pF)	R_4 (k ohms)	C_1 (pF)	R_1 (k ohms)	Dielectric constant	Dissipation Factor (2\pi f C_1 R_1)		
1	650	1.36	453.3333333	1.95	1351.041362	0.005554335812		
3	750	1.28	426.6666667	2.25	1271.56834	0.01809557368		
5	750	1.268	422.6666667	2.25	1259.647387	0.02987654614		
7	650	1.266	422	1.95	1257.660562	0.03619303232		
10	450	1.256	418.6666667	1.35	1247.726434	0.03551256336		
15	400	1.244	414.6666667	1.2	1235.805481	0.04689769513		
20	400	1.238	412.6666667	1.2	1229.845004	0.06222866728		
25	300	1.232	410.6666667	0.9	1223.884528	0.05805663224		
30	300	1.234	411.3333333	0.9	1225.871353	0.06978105602		
35	250	1.236	412	0.75	1227.858179	0.0679526491		
40	250	1.228	409.3333333	0.75	1219.910877	0.07715751557		
50	250	1.232	410.6666667	0.75	1223.884528	0.09676105373		
MLCC				DCC				
Frequency (kHz)	C_4 (pF)	R_4 (k ohms)	C_1 (pF)	Frequency (kHz)	C_4 (pF)	R_4 (k ohms)	C_1 (pF)	
1	600	1.724	574.6666667	1	250	1.594	531.3333333	
3	750	1.728	576	3	800	1.57	523.3333333	
5	450	1.726	575.3333333	5	550	1.56	520	
7	400	1.712	570.6666667	7	400	1.562	520.6666667	
10	300	1.708	569.3333333	10	350	1.555	518.3333333	
15	250	1.704	568	15	200	1.548	516	
20	200	1.694	564.6666667	20	250	1.546	515.3333333	
25	200	1.7	566.6666667	25	200	1.56	520	
30	200	1.72	573.3333333	30	150	1.532	510.6666667	
35	200	1.7	566.6666667	35	150	1.548	516	
40	150	1.72	573.3333333	40	150	1.546	515.3333333	
50	150	1.7	566.6666667	50	150	1.524	508	
Dependence with temperature				f=10kHz				
f=5kHz				f=10kHz				
Temperature (degC)	R_4 (k ohms)	C_4 (pF)	Dielectric Constant	Temperature (degC)	R_4 (k ohms)	C_4 (pF)	Dielectric Constant	
80	1.332	700	1323.225804	80	1.311	450	1302.364136	
90	1.37	600	1360.975489	90	1.35	400	1341.107234	
100	1.422	650	1412.632953	100	1.403	400	1393.758111	
110	1.505	700	1495.086213	110	1.488	400	1478.198196	
115	1.574	650	1563.631694	115	1.562	400	1551.71074	
120	1.664	600	1653.038843	120	1.656	400	1645.09154	
125	1.788	600	1776.222026	125	1.786	750	1774.2352	
130	1.876	850	1863.642349	130	1.862	600	1849.73457	
135	1.888	750	1875.563302	135	1.872	500	1859.668698	
140	1.808	450	1796.090281	140	1.786	300	1774.2352	
145	1.694	550	1682.841226	145	1.682	250	1670.920272	
150	1.614	450	1603.368204	150	1.584	300	1573.565821	
155	1.508	650	1498.066451	155	1.494	350	1484.158672	
160	1.426	1150	1416.606604	160	1.414	850	1404.685651	
f=15kHz				f=20kHz				
f=15kHz				f=20kHz				
Temperature (degC)	R_4 (k ohms)	C_4 (pF)	Dielectric Constant	Temperature (degC)	R_4 (k ohms)	C_4 (pF)	Dielectric Constant	
80	1.303	350	1294.416834	80	1.298	300	1289.44977	
90	1.338	350	1329.186281	90	1.336	300	1327.199455	
100	1.392	350	1382.83057	100	1.39	300	1380.843745	
110	1.482	300	1472.237719	110	1.475	300	1465.28383	
115	1.55	300	1539.789787	115	1.546	300	1535.816136	
120	1.648	300	1637.144238	120	1.646	250	1635.157413	
125	1.77	650	1758.340596	125	1.766	250	1754.366945	
130	1.858	250	1845.760919	130	1.845	450	1832.846553	
135	1.86	450	1847.747745	135	1.858	400	1845.760919	
140	1.78	250	1768.274723	140	1.774	250	1762.314247	
145	1.68	250	1668.933447	145	1.674	150	1662.97297	
150	1.58	250	1569.59217	150	1.576	250	1565.618519	
155	1.488	300	1478.198196	155	1.49	250	1480.185021	
160	1.408	300	1398.725174	160	1.404	250	1394.751523	