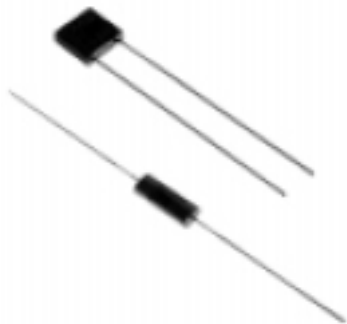


MIL-C-11015 & 39014 Multilayer Ceramic Capacitors

CK and CKR Military Grade Capacitors



MIL-C-11015 & 39014 - CK and CKR - military grade capacitors are available as radial and axial ledged capacitors with the option of hot solder dipped leads on the CKRs.

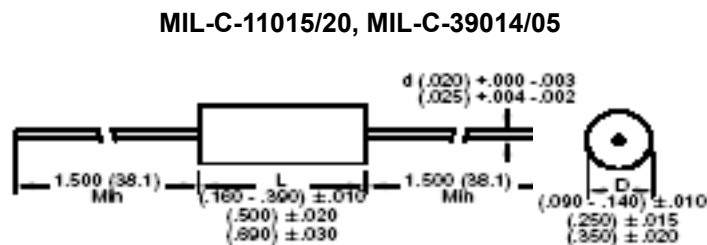
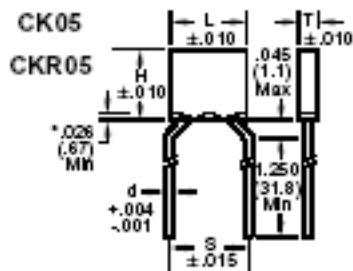
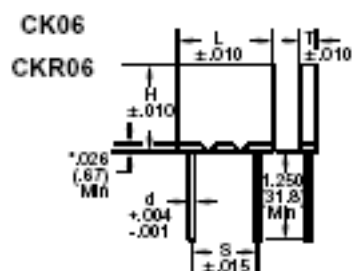
Highlights

- Available on tape and reel
- Molded case construction
- CKR available with stand-off
- Hot solder dip leads on Type CKR

Specifications

Capacitance Range: 10 pF to 3.3 μ F
Voltage Range: 50, 100, 200 Vdc
Temperature Coefficient: X7R (Mil BX or BR)

Outline Drawings



Radial

Axial

Type	Inches					mm				
	L	H	T	S	d	L	H	T	S	d
CK05	.190	.190	.090	.200	.025	4.8	4.8	2.3	5.1	.64
CKR05	.190	.190	.090	.200	.025	4.8	4.8	2.3	5.1	.64
CK06	.290	.290	.090	.200	.025	7.4	7.4	2.3	5.1	.64
CKR06	.290	.290	.090	.200	.025	7.4	7.4	2.3	5.1	.64

Type	Inches			mm		
	D	L	d	D	L	d
CK12	.090	.160	.020	2.3	4.0	.51
CKR11	.090	.160	.020	2.3	4.0	.51
CK13	.090	.250	.020	2.3	6.4	.51
CKR12	.090	.250	.020	2.3	6.4	.51
CK14	.140	.390	.025	3.6	9.9	.64
CKR14	.140	.390	.025	3.6	9.9	.64
CK15	.250	.500	.025	6.4	12.7	.64
CKR15	.250	.500	.025	6.4	12.7	.64
CK16	.350	.690	.025	8.9	17.5	.64
CKR16	.350	.690	.025	8.9	17.5	.64

TO ORDER MIL-C-11015 PARTS:

Order by CK part number shown in Ratings Table
 Example: CK05BX104M

TO ORDER MIL-C-39014 PARTS:

Indicate the prefix M39014/-- followed by the applicable MIL dash number. Example: For M39014/01-1594 (CKR05BX104MS); order M39014/011594

MIL-C-11015 & 39014 Multilayer Ceramic Capacitors

Ratings

Cap	Tol. %	MIL-C-11015/18	MIL-C-39014/01 References	39014/01 Failure Rate Levels			
				M	P	R	S
50 Vdc - Radial Leaded - CK05/M39014/01							
.012 uF	10	CK05BX123K	CKR05BX123K*	1457	1497	1537	1577
.015 uF	10	CK05BX153K	CKR05BX153K*	1458	1498	1538	1578
.015 uF	20	CK05BX153M	CKR05BX153M*	1459	1499	1539	1579
.018 uF	10	CK05BX183K	CKR05BX183K*	1460	1500	1540	1580
.022 uF	10	CK05BX223K	CKR05BX223K*	1461	1501	1541	1581
.022 uF	20	CK05BX223M	CKR05BX223M*	1462	1502	1542	1582
.027 uF	10	CK05BX273K	CKR05BX273K*	1463	1503	1543	1583
.033 uF	10	CK05BX333K	CKR05BX333K*	1464	1504	1544	1584
.033 uF	20	CK05BX333M	CKR05BX333M*	1465	1505	1545	1585
.039 uF	10	CK05BX393K	CKR05BX393K*	1466	1506	1546	1586
.047 uF	10	CK05BX473K	CKR05BX473K*	1467	1507	1547	1587
.047 uF	20	CK05BX473M	CKR05BX473M*	1468	1508	1548	1588
.056 uF	10	CK05BX563K	CKR05BX563K*	1469	1509	1549	1589
.068 uF	10	CK05BX683K	CKR05BX683K*	1470	1510	1550	1590
.068 uF	20	CK05BX683M	CKR05BX683M*	1471	1511	1551	1591
.082 uF	10	CK05BX823K	CKR05BX823K*	1472	1512	1552	1592
.10 uF	10	CK05BX104K	CKR05BX104K*	1473	1513	1553	1593
.10 uF	20	CK05BX104M	CKR05BX104M*	1474	1514	1554	1594
100 Vdc - Radial Leaded - CK05/M39014/01							
1200 pF	10	CK05BX122K	CKR05BX122K*	1239	1279	1319	1359
1500 pF	10	CK05BX152K	CKR05BX152K*	1240	1280	1320	1360
1500 pF	20	CK05BX152M	CKR05BX152M*	1441	1481	1521	1561
1800 pF	10	CK05BX182K	CKR05BX182K*	1442	1482	1522	1562
2200 pF	10	CK05BX222K	CKR05BX222K*	1443	1483	1523	1563
2200 pF	20	CK05BX222M	CKR05BX222M*	1444	1484	1524	1564
2700 pF	10	CK05BX272K	CKR05BX272K*	1445	1485	1525	1565
3300 pF	10	CK05BX332K	CKR05BX332K*	1446	1486	1526	1566
3300 pF	20	CK05BX332M	CKR05BX332M*	1447	1487	1527	1567
3900 pF	10	CK05BX392K	CKR05BX392K*	1448	1488	1528	1568
4700 pF	10	CK05BX472K	CKR05BX472K*	1449	1489	1529	1569
4700 pF	20	CK05BX472M	CKR05BX472M*	1450	1490	1530	1570
5600 pF	10	CK05BX562K	CKR05BX562K*	1451	1491	1531	1571
6800 pF	10	CK05BX682K	CKR05BX682K*	1452	1492	1532	1572
6800 pF	20	CK05BX682M	CKR05BX682M*	1453	1493	1533	1573
8200 pF	10	CK05BX822K	CKR05BX822K*	1454	1494	1534	1574
.01 uF	10	CK05BX103K	CKR05BX103K*	1455	1495	1535	1575
.01 uF	20	CK05BX103M	CKR05BX103M*	1456	1496	1536	1576

Cap	Tol. %	MIL-C-11015/18	MIL-C-39014/01 References	39014/01 Failure Rate Levels			
				M	P	R	S
200 Vdc - Radial Leaded - CK05/M39014/01							
10 pF	10	CK05BX100K	CKR05BX100K*	1201	1241	1281	1321
10 pF	20	CK05BX100M	CKR05BX100M*	1202	1242	1282	1322
12 pF	10	CK05BX120K	CKR05BX120K*	1203	1243	1283	1323
15 pF	10	CK05BX150K	CKR05BX150K*	1204	1244	1284	1324
15 pF	20	CK05BX150M	CKR05BX150M*	1205	1245	1285	1325
18 pF	10	CK05BX180K	CKR05BX180K*	1206	1246	1286	1326
22 pF	10	CK05BX220K	CKR05BX220K*	1207	1247	1287	1327
22 pF	20	CK05BX220M	CKR05BX220M*	1208	1248	1288	1328
27 pF	10	CK05BX270K	CKR05BX270K*	1209	1249	1289	1329
33 pF	10	CK05BX330K	CKR05BX330K*	1210	1250	1290	1330
33 pF	20	CK05BX330M	CKR05BX330M*	1211	1251	1291	1331
39 pF	10	CK05BX390K	CKR05BX390K*	1212	1252	1292	1332
47 pF	10	CK05BX470K	CKR05BX470K*	1213	1253	1293	1333
47 pF	20	CK05BX470M	CKR05BX470M*	1214	1254	1294	1334
56 pF	10	CK05BX560K	CKR05BX560K*	1215	1255	1295	1335
68 pF	10	CK05BX680K	CKR05BX680K*	1216	1256	1296	1336
68 pF	20	CK05BX680M	CKR05BX680M*	1217	1257	1297	1337
82 pF	10	CK05BX820K	CKR05BX820K*	1218	1258	1298	1338
100 pF	10	CK05BX101K	CKR05BX101K*	1219	1259	1299	1339
100 pF	20	CK05BX101M	CKR05BX101M*	1220	1260	1300	1340
120 pF	10	CK05BX121K	CKR05BX121K*	1221	1261	1301	1341
150 pF	10	CK05BX151K	CKR05BX151K*	1222	1262	1302	1342
150 pF	20	CK05BX151M	CKR05BX151M*	1223	1263	1303	1343
180 pF	10	CK05BX181K	CKR05BX181K*	1224	1264	1304	1344
220 pF	10	CK05BX221K	CKR05BX221K*	1225	1265	1305	1345
220 pF	20	CK05BX221M	CKR05BX221M*	1226	1266	1306	1346
270 pF	10	CK05BX271K	CKR05BX271K*	1227	1267	1307	1347
330 pF	10	CK05BX331K	CKR05BX331K*	1228	1268	1308	1348
330 pF	20	CK05BX331M	CKR05BX331M*	1229	1269	1309	1349
390 pF	10	CK05BX391K	CKR05BX391K*	1230	1270	1310	1350
470 pF	10	CK05BX471K	CKR05BX471K*	1231	1271	1311	1351
470 pF	20	CK05BX471M	CKR05BX471M*	1232	1272	1312	1352
560 pF	10	CK05BX561K	CKR05BX561K*	1233	1273	1313	1353
680 pF	10	CK05BX681K	CKR05BX681K*	1234	1274	1314	1354
680 pF	20	CK05BX681M	CKR05BX681M*	1235	1275	1315	1355
820 pF	10	CK05BX821K	CKR05BX821K*	1236	1276	1316	1356
1000 pF	10	CK05BX102K	CKR05BX102K*	1237	1277	1317	1357
1000 pF	20	CK05BX102M	CKR05BX102M*	1238	1278	1318	1358

*Insert proper letter symbol for Failure Rate Designator

M = 1% / 1000 Hours, P = 0.1% / 1000 Hours

R = 0.01% / 1000 Hours, S = 0.001% / 1000 Hours

Add 'V' at end of failure rate designator if stand-off design is required, (CKR only)

Add 'TR' to end of part number for Tape & Reel

Leads will be trimmed to .625' length

CK05 - 2,000 per reel

CKR05 - 1,700 per reel

(Available in full reels only)

MIL-C-11015 & 39014 Multilayer Ceramic Capacitors

Ratings

Cap	Tol. %	MIL-C-11015/19	MIL-C-39014/02 References	39014/02 Failure Rate Levels			
				M	P	R	S
50 Vdc - Radial Leaded - CK06/M39014/02							
.12 uF	10	CK06BX124K	CKR06BX124K*	1233	1273	1313	1353
.15 uF	10	CK06BX154K	CKR06BX154K*	1234	1274	1314	1354
.15 uF	20	CK06BX154M					
.18 uF	10	CK06BX184K	CKR06BX184K*	1235	1275	1315	1355
.22 uF	10	CK06BX224K	CKR06BX224K*	1236	1276	1316	1356
.22 uF	20	CK06BX224M					
.27 uF	10	CK06BX274K	CKR06BX274K*	1237	1277	1317	1357
.33 uF	10	CK06BX334K	CKR06BX334K*	1238	1278	1318	1358
.33 uF	20	CK06BX334M					
.39 uF	10	CK06BX394K	CKR06BX394K*	1239	1279	1319	1359
.47 uF	10	CK06BX474K	CKR06BX474K*	1240	1280	1320	1360
.47 uF	20	CK06BX474M					
.56 uF	10	CK06BX564K	CKR06BX564K*	1404	1408	1412	1416
.68 uF	10	CK06BX684K	CKR06BX684K*	1405	1409	1413	1417
.68 uF	20	CK06BX684M					
.82 uF	10	CK06BX824K	CKR06BX824K*	1406	1410	1414	1418
1.0 uF	10	CK06BX105K	CKR06BX105K*	1407	1411	1415	1419
1.0 uF	20	CK06BX105M					
100 Vdc - Radial Leaded - CK06/M39014/02							
.012 uF	10	CK06BX123K	CKR06BX123K*	1231	1271	1311	1351
.015 uF	10	CK06BX153K	CKR06BX153K*	1220	1260	1300	1340
.015 uF	20	CK06BX153M					
.018 uF	10	CK06BX183K	CKR06BX183K*	1221	1261	1301	1341
.022 uF	10	CK06BX223K	CKR06BX223K*	1222	1262	1302	1342
.022 uF	20	CK06BX223M					
.027 uF	10	CK06BX273K	CKR06BX273K*	1232	1272	1312	1352
.033 uF	10	CK06BX333K	CKR06BX333K*	1223	1263	1303	1343
.033 uF	20	CK06BX333M					
.039 uF	10	CK06BX393K	CKR06BX393K*	1224	1264	1304	1344

Cap	Tol. %	MIL-C-11015/19	MIL-C-39014/02 References	39014/02 Failure Rate Levels			
				M	P	R	S
100 Vdc - Radial Leaded - CK05/M39014/02							
.047 uF	10	CK06BX473K	CKR06BX473K*	1225	1265	1305	1345
.047 uF	20	CK06BX473M					
.056 uF	10	CK06BX563K	CKR06BX563K*	1226	1266	1306	1346
.068 uF	10	CK06BX683K	CKR06BX683K*	1227	1267	1307	1347
.068 uF	20	CK06BX683M					
.082 uF	10	CK06BX823K	CKR06BX823K*	1229	1269	1309	1349
.10 uF	10	CK06BX104K	CKR06BX104K*	1230	1270	1310	1350
.10 uF	20	CK06BX104M					
200 Vdc - Radial Leaded - CK06/M39014/02							
1200 pF	10	CK06BX122K	CKR06BX122K*	1201	1241	1281	1321
1500 pF	10	CK06BX152K	CKR06BX152K*	1202	1242	1282	1322
1500 pF	20	CK06BX152M	CKR06BX152M*	1203	1243	1283	1323
1800 pF	10	CK06BX182K	CKR06BX182K*	1204	1244	1284	1324
2200 pF	10	CK06BX222K	CKR06BX222K*	1206	1246	1286	1326
2200 pF	20	CK06BX222M	CKR06BX222M*	1207	1247	1287	1327
2700 pF	10	CK06BX272K	CKR06BX272K*	1208	1248	1288	1328
3300 pF	10	CK06BX332K	CKR06BX332K*	1209	1249	1289	1329
3300 pF	20	CK06BX332M	CKR06BX332M*	1210	1250	1290	1330
3900 pF	10	CK06BX392K	CKR06BX392K*	1211	1251	1291	1331
4700 pF	10	CK06BX472K	CKR06BX472K*	1212	1252	1292	1332
4700 pF	20	CK06BX472M	CKR06BX472M*	1213	1253	1293	1333
5600 pF	10	CK06BX562K	CKR06BX562K*	1214	1254	1294	1334
6800 pF	10	CK06BX682K	CKR06BX682K*	1215	1255	1295	1335
6800 pF	20	CK06BX682M	CKR06BX682M*	1216	1256	1296	1336
8200 pF	10	CK06BX822K	CKR06BX822K*	1217	1257	1297	1337
.01 uF	10	CK06BX103K	CKR06BX103K*	1218	1258	1298	1338
.01 uF	20	CK06BX103M	CKR06BX103M*	1219	1259	1299	1339

Add 'TR' to end of part number for Tape & Reel
Leads will be trimmed to .625' length
CK06 & CKR06 1,500 per reel
(Available in full reels only)

*Insert proper letter symbol for Failure Rate Designator
M = 1% / 1000 Hours, P = 0.1% / 1000 Hours
R = 0.01% / 1000 Hours, S = 0.001% / 1000 Hours

Add 'V' at end of failure rate designator if stand-off design is required, (CKR only)

Cap	Tol. %	MIL-C-11015/20	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
50 Vdc - Axial Leaded - CK12/M39014/05							
5600 pF	10	CK12BX562K	CKR11BX562K*	2651	2851	2051	2251
6800 pF	10	CK12BX682K	CKR11BX682K*	2652	2852	2052	2252
6800 pF	20	CK12BX682M	CKR11BX682M*	2653	2853	2053	2253
8200 pF	10	CK12BX822K	CKR11BX822K*	2654	2854	2054	2254
0.01 uF	10	CK12BX103K	CKR11BX103K*	2655	2855	2055	2255
0.01 uF	20	CK12BX103M	CKR11BX103M*	2656	2856	2056	2256

Cap	Tol. %	MIL-C-11015/20	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
100 Vdc - Axial Leaded - CK12/M39014/05							
10 pF	10	CK12BX100K	CKR11BX100K*	2601	2801	2001	2201
10 pF	20	CK12BX100M	CKR11BX100M*	2602	2802	2002	2202
12 pF	10	CK12BX120K	CKR11BX120K*	2603	2803	2003	2203
15 pF	10	CK12BX150K	CKR11BX150K*	2604	2804	2004	2204
15 pF	20	CK12BX150M	CKR11BX150M*	2605	2805	2005	2205
18 pF	10	CK12BX180K	CKR11BX180K*	2606	2806	2006	2206

MIL-C-11015 & 39014 Multilayer Ceramic Capacitors

Ratings

Cap	Tol. %	MIL-C-11015/20	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
100 Vdc - Axial Leaded - CK12/M39014/05							
22 pF	10	CK12BX220K	CKR11BX220K*	2607	2807	2007	2207
22 pF	20	CK12BX220M	CKR11BX220M*	2608	2808	2008	2208
27 pF	10	CK12BX270K	CKR11BX270K*	2609	2809	2009	2209
33 pF	10	CK12BX330K	CKR11BX330K*	2610	2810	2010	2210
33 pF	20	CK12BX330M	CKR11BX330M*	2611	2811	2011	2211
39 pF	10	CK12BX390K	CKR11BX390K*	2612	2812	2012	2212
47 pF	10	CK12BX470K	CKR11BX470K*	2613	2813	2013	2213
47 pF	20	CK12BX470M	CKR11BX470M*	2614	2814	2014	2214
56 pF	10	CK12BX560K	CKR11BX560K*	2615	2815	2015	2215
68 pF	10	CK12BX680K	CKR11BX680K*	2616	2816	2016	2216
68 pF	20	CK12BX680M	CKR11BX680M*	2617	2817	2017	2217
82 pF	10	CK12BX820K	CKR11BX820K*	2618	2818	2018	2218
100 pF	10	CK12BX101K	CKR11BX101K*	2619	2819	2019	2219
100 pF	20	CK12BX101M	CKR11BX101M*	2620	2820	2020	2220
120 pF	10	CK12BX121K	CKR11BX121K*	2621	2821	2021	2221
150 pF	10	CK12BX151K	CKR11BX151K*	2622	2822	2022	2222
150 pF	20	CK12BX151M	CKR11BX151M*	2623	2823	2023	2223
180 pF	10	CK12BX181K	CKR11BX181K*	2624	2824	2024	2224
220 pF	10	CK12BX221K	CKR11BX221K*	2625	2825	2025	2225
220 pF	20	CK12BX221M	CKR11BX221M*	2626	2826	2026	2226
270 pF	10	CK12BX271K	CKR11BX271K*	2627	2827	2027	2227
330 pF	10	CK12BX331K	CKR11BX331K*	2628	2828	2028	2228

Cap	Tol. %	MIL-C-11015/20	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
100 Vdc - Axial Leaded - CK12/M39014/05							
330 pF	20	CK12BX331M	CKR11BX331M*	2629	2829	2029	2229
390 pF	10	CK12BX391K	CKR11BX391K*	2630	2830	2030	2230
470 pF	10	CK12BX471K	CKR11BX471K*	2631	2831	2031	2231
470 pF	20	CK12BX471M	CKR11BX471M*	2632	2832	2032	2232
560 pF	10	CK12BX561K	CKR11BX561K*	2633	2833	2033	2233
680 pF	10	CK12BX681K	CKR11BX681K*	2634	2834	2034	2234
680 pF	20	CK12BX681M	CKR11BX681M*	2635	2835	2035	2235
820 pF	10	CK12BX821K	CKR11BX821K*	2636	2836	2036	2236
1000 pF	10	CK12BX102K	CKR11BX102K*	2637	2837	2037	2237
1000 pF	20	CK12BX102M	CKR11BX102M*	2638	2838	2038	2238
1200 pF	10	CK12BX122K	CKR11BX122K*	2639	2839	2039	2239
1500 pF	10	CK12BX152K	CKR11BX152K*	2640	2840	2040	2240
1500 pF	20	CK12BX152M	CKR11BX152M*	2641	2841	2041	2241
1800 pF	10	CK12BX182K	CKR11BX182K*	2642	2842	2042	2242
2200 pF	10	CK12BX222K	CKR11BX222K*	2643	2843	2043	2243
2200 pF	20	CK12BX222M	CKR11BX222M*	2644	2844	2044	2244
2700 pF	10	CK12BX272K	CKR11BX272K*	2645	2845	2045	2245
3300 pF	10	CK12BX332K	CKR11BX332K*	2646	2846	2046	2246
3300 pF	20	CK12BX332M	CKR11BX332M*	2647	2847	2047	2247
3900 pF	10	CK12BX392K	CKR11BX392K*	2648	2848	2048	2248
4700 pF	10	CK12BX472K	CKR11BX472K*	2649	2849	2049	2249
4700 pF	20	CK12BX472M	CKR11BX472M*	2650	2850	2050	2250

*Insert proper letter symbol for Failure Rate Designator
M = 1% / 1000 Hours, P = 0.1% / 1000 Hours
R = 0.01% / 1000 Hours, S = 0.001% / 1000 Hours

Add 'TR' to end of part number for Tape & Reel
CK12 & CKR11 5,000 per reel
(Available in full reels only)

Cap	Tol. %	MIL-C-11015/19	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
50 Vdc - Axial Leaded - CK13/M39014/05							
.012 uF	10	CK13BX123K	CKR12BX123K*	2663	2863	2063	2263
.015 uF	10	CK13BX153K	CKR12BX153K*	2664	2864	2064	2264
.015 uF	20	CK13BX153M	CKR12BX153M*	2665	2865	2065	2265
.018 uF	10	CK13BX183K	CKR12BX183K*	2666	2866	2066	2266
.022 uF	10	CK13BX223K	CKR12BX223K*	2667	2867	2067	2267
.022 uF	20	CK13BX223M	CKR12BX223M*	2668	2868	2068	2268
.027 uF	10	CK13BR273K	CKR12BX273K*	2669	2869	2069	2269
.033 uF	10	CK13BR333K	CKR12BX333K*	2670	2870	2070	2270
.033 uF	20	CK13BR333M	CKR12BX333M*	2671	2871	2071	2271

Cap	Tol. %	MIL-C-11015/19	MIL-C-39014/05 References	39014/05 Failure Rate Levels			
				M	P	R	S
50 Vdc - Axial Leaded - CK13/M39014/05							
.039 uF	10	CK13BR393K	CKR12BX393K*	2672	2872	2072	2272
.047 uF	10	CK13BR473K	CKR12BX473K*	2673	2873	2073	2273
.047 uF	20	CK13BR473M	CKR12BX473M*	2674	2874	2074	2274
100 Vdc - Axial Leaded - CK13/M39014/05							
5600 pF	10	CK13BX562K	CKR12BX562K*	2657	2857	2057	2257
6800 pF	10	CK13BX682K	CKR12BX682K*	2658	2858	2058	2258
6800 pF	20	CK13BX682M	CKR12BX682M*	2659	2859	2059	2259
8200 pF	10	CK13BX822K	CKR12BX822K*	2660	2860	2060	2260
.01 uF	10	CK13BX103K	CKR12BX103K*	2661	2861	2061	2261
.01 uF	20	CK13BX103M	CKR12BX103M*	2662	2862	2062	2262

MIL-C-11015 & 39014 Multilayer Ceramic Capacitors

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