

Type 871P

MIL-PRF-83421/6

CRH31, CRH32, CRH33, CHR34



Capacitor,
Fixed,
Metallized plastic film dielectric,
DC and AC,
Hermetically sealed in metal cases,
Established reliability

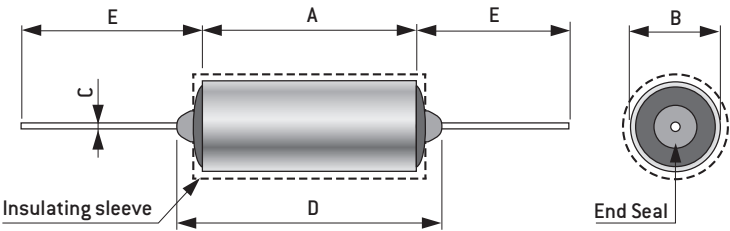
GENERAL CHARACTERISTICS

Dielectric material	Normally polyphenylene sulfide
Rated temperature	−55°C to +125°C.
Capacitance range	1 nF to 22 µF
Voltage range	30 V to 400 V
Capacitance tolerance	±0.25%, ±0.5%, ±1%, ±2%, ±5%, ±10%
Failure rate level (% per 1,000 hours)	M (1%), P (0.1%), R (0.01%), and S (0.001%).

Full details and most up to date information found at government website.

DIMENSIONS

A		B		D	
See tables on the next pages					
C		E			
Inches	(mm)	Inches	(mm)		
See Note 1		1.625 min	(41.28 min)		



NOTES

- Number 22 AWG wire 0.025"±0.002" (0.64±0.05 mm) for case diameters of 0.312" (7.92 mm) and less.
Number 20 AWG wire 0.032"±0.002" (0.81±0.05 mm) for case diameters of 0.4" (10.16 mm) and 0.5" (12.70 mm). Number 18 AWG wire 0.04"±0.002" (1.02±0.05 mm) for case diameters of 0.562" (14.27 mm) and over.
- Dimensions are in inches.
- Metric equivalents are given for general information only and are in parentheses.
- See table I for additional dimensions.
- Insulating sleeve shall extend beyond the capacitor body. Insulating sleeve thickness shall not exceed 0.005" (0.13 mm).
- Plastic insulating sleeve shall be transparent; marking shall be applied to the capacitor case.
- Lead length may be a minimum of one inch (25.4 mm) long for use in tape and reel packaging, when specified in the ordering data

CIRCUIT DIAGRAM



HOW TO ORDER

M83421/	01	—	1	123	M
Performance specification number	Specification sheet number	Dash.	Single digit designating style	Nonsignificant dash number	Failure rate level
		— = Standard product H = Random vibration option.			M = 1%/1,000 hours P = 0.1%/1,000 hours R = 0.01%/1,000 hours S = 0.001%/1,000 hours

CRH31, CRH32, CRH33, CHR34

MIL-PRF-83421/6

Type 871P

ELECTRICAL CHARACTERISTICS, DIMENSIONS, AND DASH NUMBERS

Capacitance (μF)	Dimensions*						DASH NUMBERS**						AC Ratings (sinusoidal operation -65° to +85°C)***					
	A±0.030 (1.57 mm)		B+0.020-0.010(+0.51-0.25mm)		D max		Capacitance tolerance value (in %)						0 to 400Hz		4 KHz		40 KHz	
	Inches	(mm)	Inches	(mm)	Inches	(mm)	±0.25	±0.5	±1	±2	±5	±10	Volts	Amp.	Volts	Amp.	Volts	Amp.
CRH31 - 30 VOLTS (DC RATING)																		
0.001	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1001-	1002-	1003-	1004-	1005-	1006-	22.0	0.001	22.0	0.001	22.0	0.006
0.0012	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1007-	1008-	1009-	1010-	1011-	1012-	22.0	0.001	22.0	0.001	22.0	0.007
0.0015	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1013-	1014-	1015-	1016-	1017-	1018-	22.0	0.001	22.0	0.001	22.0	0.008
0.0018	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1019-	1020-	1021-	1022-	1023-	1024-	22.0	0.001	22.0	0.001	22.0	0.010
0.002	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1025-	1026-	1027-	1028-	1029-	1030-	22.0	0.001	22.0	0.001	22.0	0.011
0.0022	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1031-	1032-	1033-	1034-	1035-	1036-	22.0	0.001	22.0	0.001	22.0	0.012
0.0027	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1037-	1038-	1039-	1040-	1041-	1042-	22.0	0.001	22.0	0.002	22.0	0.015
0.0033	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1043-	1044-	1045-	1046-	1047-	1048-	22.0	0.001	22.0	0.002	22.0	0.018
0.0039	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1049-	1050-	1051-	1052-	1053-	1054-	22.0	0.001	22.0	0.002	22.0	0.021
0.0047	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1055-	1056-	1057-	1058-	1059-	1060-	22.0	0.001	22.0	0.003	22.0	0.026
0.005	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1061-	1062-	1063-	1064-	1065-	1066-	22.0	0.001	22.0	0.003	22.0	0.028
0.0056	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1067-	1068-	1069-	1070-	1071-	1072-	22.0	0.001	22.0	0.003	22.0	0.031
0.0068	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1073-	1074-	1075-	1076-	1077-	1078-	22.0	0.001	22.0	0.004	22.0	0.037
0.0082	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1079-	1080-	1081-	1082-	1083-	1084-	22.0	0.001	22.0	0.005	22.0	0.045
0.01	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1085-	1086-	1087-	1088-	1089-	1090-	22.0	0.001	22.0	0.006	22.0	0.055
0.012	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1091-	1092-	1093-	1094-	1095-	1096-	22.0	0.001	22.0	0.007	22.0	0.066
0.015	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1097-	1098-	1099-	1100-	1101-	1102-	22.0	0.001	22.0	0.008	22.0	0.082
0.018	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1103-	1104-	1105-	1106-	1107-	1108-	22.0	0.001	22.0	0.010	22.0	0.100
0.02	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1109-	1110-	1111-	1112-	1113-	1114-	22.0	0.001	22.0	0.011	22.0	0.110
0.022	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	1115-	1116-	1117-	1118-	1119-	1120-	22.0	0.001	22.0	0.012	22.0	0.120
0.027	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1121-	1122-	1123-	1124-	1125-	1126-	22.0	0.002	22.0	0.015	22.0	0.150
0.033	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1127-	1128-	1129-	1130-	1131-	1132-	22.0	0.002	22.0	0.018	22.0	0.180
0.039	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1133-	1134-	1135-	1136-	1137-	1138-	22.0	0.002	22.0	0.021	22.0	0.220
0.047	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1139-	1140-	1141-	1142-	1143-	1144-	22.0	0.003	22.0	0.026	22.0	0.260
0.05	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1145-	1146-	1147-	1148-	1149-	1150-	22.0	0.003	22.0	0.028	22.0	0.280
0.056	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	1151-	1152-	1153-	1154-	1155-	1156-	22.0	0.003	22.0	0.031	22.0	0.310
0.068	0.687	(17.45)	0.170	(4.32)	0.887	(22.53)	1157-	1158-	1159-	1160-	1161-	1162-	22.0	0.004	22.0	0.037	22.0	0.370
0.082	0.687	(17.45)	0.170	(4.32)	0.887	(22.53)	1163-	1164-	1165-	1166-	1167-	1168-	22.0	0.005	22.0	0.045	22.0	0.450
0.1	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	1169-	1170-	1171-	1172-	1173-	1174-	22.0	0.006	22.0	0.055	22.0	0.550
0.12	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	1175-	1176-	1177-	1178-	1179-	1180-	22.0	0.007	22.0	0.066	22.0	0.660
0.15	0.562	(14.27)	0.235	(5.97)	0.762	(19.35)	1181-	1182-	1183-	1184-	1185-	1186-	22.0	0.008	22.0	0.082	22.0	0.830
0.18	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1187-	1188-	1189-	1190-	1191-	1192-	22.0	0.010	22.0	0.100	22.0	1.000
0.20	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1193-	1194-	1195-	1196-	1197-	1198-	22.0	0.011	22.0	0.110	20.0	1.000
0.22	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1199-	1200-	1201-	1202-	1203-	1204-	22.0	0.012	22.0	0.120	18.5	1.020
0.27	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1205-	1206-	1207-	1208-	1209-	1210-	22.0	0.015	22.0	0.150	17.0	1.150
0.33	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1211-	1212-	1213-	1214-	1215-	1216-	22.0	0.018	22.0	0.180	16.0	1.320
0.39	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	1217-	1218-	1219-	1220-	1221-	1222-	22.0	0.021	22.0	0.210	15.0	1.460
0.47	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	1223-	1224-	1225-	1226-	1227-	1228-	22.0	0.026	22.0	0.260	14.0	1.650
0.50	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	1229-	1230-	1231-	1232-	1233-	1234-	22.0	0.028	22.0	0.280	13.5	1.690
0.56	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	1235-	1236-	1237-	1238-	1239-	1240-	22.0	0.031	22.0	0.310	12.9	1.810
0.68	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	1241-	1242-	1243-	1244-	1245-	1246-	22.0	0.037	22.0	0.370	12.0	2.040
0.82	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	1247-	1248-	1249-	1250-	1251-	1252-	22.0	0.045	22.0	0.450	10.0	2.050
1.0	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	1253-	1254-	1255-	1256-	1257-	1258-	22.0	0.055	22.0	0.550	8.4	2.100
1.2	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	1259-	1260-	1261-	1262-	1263-	1264-	22.0	0.066	22.0	0.660	7.2	2.150
1.5	0.813	(20.65)	0.400	(10.16)	1.013	(25.73)	1265-	1266-	1267-	1268-	1269-	1270-	22.0	0.082	22.0	0.830	5.8	2.170
1.8	0.813	(20.65)	0.400	(10.16)	1.013	(25.73)	1271-	1272-	1273-	1274-	1275-	1276-	22.0	0.099	22.0	0.990	4.8	2.200
2.0	0.813	(20.65)	0.400	(10.16)	1.013	(25.73)	1277-	1278-	1279-	1280-	1281-	1282-	22.0	0.110	22.0	1.100	4.4	2.200
2.2	0.813	(20.65)	0.400	(10.16)	1.013	(25.73)	1283-	1284-	1285-	1286-	1287-	1288-	22.0	0.120	22.0	1.210	4.0	2.200
2.7	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	1289-	1290-	1291-	1292-	1293-	1294-	22.0	0.15	22.0	1.490	3.3	2.200
3.0	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	1295-	1296-	1297-	1298-	1299-	1300-	22.0	0.17	22.0	1.650	2.9	2.200
3.3	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	1301-	1302-	1303-	1304-	1305-	1306-	22.0	0.18	22.0	1.820	2.7	2.200
3.9	1.375	(34.93)	0.400	(10.16)	1.575	(40.01)	1307-	1308-	1309-	1310-	1311-	1312-	22.0	0.21	22.0	2.140	2.3	2.200
4.7	1.375	(34.93)	0.500	(12.70)	1.575	(40.01)	1313-	1314-	1315-	1316-	1317-	1318-	22.0	0.26	18.7	2.200	1.9	2.200
5.0	1.375	(34.93)	0.500	(12.70)	1.575	(40.01)	1319-	1320-	1321-	1322-	1323-	1324-	22.0	0.28	17.6	2.200	1.8	2.200
5.6	1.375	(34.93)	0.500	(12.70)	1.575	(40.01)	1325-	1326-										

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CRH31, CRH32, CRH33, CHR34

ELECTRICAL CHARACTERISTICS, DIMENSIONS, AND DASH NUMBERS

Capacitance (μF)	Dimensions*						DASH NUMBERS**						AC Ratings (sinusoidal operation -65° to +85°C)***					
	A±0.030 (1.57 mm)		B±0.020 -0.010(+0.51 -0.25mm)		D max		Capacitance tolerance value (in %)						0 to 400Hz		4 KHz		40 KHz	
	Inches	(mm)	Inches	(mm)	Inches	(mm)	±0.25	±0.5	±1	±2	±5	±10	Volts	Amp.	Volts	Amp.	Volts	Amp.
CRH32 - 50 VOLTS (DC RATING)																		
0.001	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2001-	2002-	2003-	2004-	2005-	2006-	36.0	0.001	36.0	0.001	36.0	0.009
0.0012	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2007-	2008-	2009-	2010-	2011-	2012-	36.0	0.001	36.0	0.001	36.0	0.011
0.0015	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2013-	2014-	2015-	2016-	2017-	2018-	36.0	0.001	36.0	0.001	36.0	0.013
0.0018	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2019-	2020-	2021-	2022-	2023-	2024-	36.0	0.001	36.0	0.002	36.0	0.016
0.002	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2025-	2026-	2027-	2028-	2029-	2030-	36.0	0.001	36.0	0.002	36.0	0.018
0.0022	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2031-	2032-	2033-	2034-	2035-	2036-	36.0	0.001	36.0	0.002	36.0	0.020
0.0027	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2037-	2038-	2039-	2040-	2041-	2042-	36.0	0.001	36.0	0.002	36.0	0.024
0.0033	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2043-	2044-	2045-	2046-	2047-	2048-	36.0	0.001	36.0	0.003	36.0	0.030
0.0039	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2049-	2050-	2051-	2052-	2053-	2054-	36.0	0.001	36.0	0.004	36.0	0.035
0.0047	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2055-	2056-	2057-	2058-	2059-	2060-	36.0	0.001	36.0	0.004	36.0	0.042
0.005	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2061-	2062-	2063-	2064-	2065-	2066-	36.0	0.001	36.0	0.005	36.0	0.045
0.0056	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2067-	2068-	2069-	2070-	2071-	2072-	36.0	0.001	36.0	0.005	36.0	0.050
0.0068	0.500	[12.70]	0.170	[4.32]	0.700	[17.78]	2073-	2074-	2075-	2076-	2077-	2078-	36.0	0.001	36.0	0.006	36.0	0.061
0.0082	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	2079-	2080-	2081-	2082-	2083-	2084-	36.0	0.001	36.0	0.007	36.0	0.074
0.01	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	2085-	2086-	2087-	2088-	2089-	2090-	36.0	0.001	36.0	0.009	36.0	0.090
0.012	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	2091-	2092-	2093-	2094-	2095-	2096-	36.0	0.001	36.0	0.011	36.0	0.110
0.015	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	2097-	2098-	2099-	2100-	2101-	2102-	36.0	0.001	36.0	0.013	36.0	0.140
0.018	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	2103-	2104-	2105-	2106-	2107-	2108-	36.0	0.002	36.0	0.016	36.0	0.160
0.02	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	2109-	2110-	2111-	2112-	2113-	2114-	36.0	0.002	36.0	0.018	36.0	0.180
0.022	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	2115-	2116-	2117-	2118-	2119-	2120-	36.0	0.002	36.0	0.020	36.0	0.200
0.027	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	2121-	2122-	2123-	2124-	2125-	2126-	36.0	0.002	36.0	0.024	36.0	0.240
0.033	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	2127-	2128-	2129-	2130-	2131-	2132-	36.0	0.003	36.0	0.030	36.0	0.300
0.039	0.687	[17.45]	0.170	[4.32]	0.887	[22.53]	2133-	2134-	2135-	2136-	2137-	2138-	36.0	0.004	36.0	0.035	36.0	0.350
0.047	0.687	[17.45]	0.170	[4.32]	0.887	[22.53]	2139-	2140-	2141-	2142-	2143-	2144-	36.0	0.004	36.0	0.042	36.0	0.420
0.05	0.687	[17.45]	0.170	[4.32]	0.887	[22.53]	2145-	2146-	2147-	2148-	2149-	2150-	36.0	0.005	36.0	0.045	36.0	0.450
0.056	0.687	[17.45]	0.193	[4.90]	0.887	[22.53]	2151-	2152-	2153-	2154-	2155-	2156-	36.0	0.005	36.0	0.050	36.0	0.500
0.068	0.687	[17.45]	0.193	[4.90]	0.887	[22.53]	2157-	2158-	2159-	2160-	2161-	2162-	36.0	0.006	36.0	0.061	34.0	0.580
0.082	0.813	[20.65]	0.193	[4.90]	1.013	[25.73]	2163-	2164-	2165-	2166-	2167-	2168-	36.0	0.007	36.0	0.074	32.0	0.660
0.1	0.813	[20.65]	0.193	[4.90]	1.013	[25.73]	2169-	2170-	2171-	2172-	2173-	2174-	36.0	0.009	36.0	0.090	30.0	0.750
0.12	0.687	[17.45]	0.235	[5.97]	0.887	[22.53]	2175-	2176-	2177-	2178-	2179-	2180-	36.0	0.011	36.0	0.110	30.0	0.900
0.15	0.687	[17.45]	0.235	[5.97]	0.887	[22.53]	2181-	2182-	2183-	2184-	2185-	2186-	36.0	0.013	36.0	0.140	26.0	0.980
0.18	0.813	[20.65]	0.235	[5.97]	1.013	[25.73]	2187-	2188-	2189-	2190-	2191-	2192-	36.0	0.016	36.0	0.160	25.0	1.130
0.20	0.813	[20.65]	0.235	[5.97]	1.013	[25.73]	2193-	2194-	2195-	2196-	2197-	2198-	36.0	0.018	36.0	0.180	24.0	1.200
0.22	0.813	[20.65]	0.235	[5.97]	1.013	[25.73]	2199-	2200-	2201-	2202-	2203-	2204-	36.0	0.020	36.0	0.200	23.0	1.270
0.27	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	2205-	2206-	2207-	2208-	2209-	2210-	36.0	0.024	36.0	0.240	19.0	1.280
0.33	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	2211-	2212-	2213-	2214-	2215-	2216-	36.0	0.030	36.0	0.300	18.0	1.480
0.39	0.813	[20.65]	0.312	[7.92]	1.013	[25.73]	2217-	2218-	2219-	2220-	2221-	2222-	36.0	0.035	36.0	0.350	17.0	1.660
0.47	0.813	[20.65]	0.312	[7.92]	1.013	[25.73]	2223-	2224-	2225-	2226-	2227-	2228-	36.0	0.042	36.0	0.420	15.7	1.850
0.50	0.813	[20.65]	0.312	[7.92]	1.013	[25.73]	2229-	2230-	2231-	2232-	2233-	2234-	36.0	0.045	36.0	0.450	15.2	1.900
0.56	0.813	[20.65]	0.400	[10.16]	1.013	[25.73]	2235-	2236-	2237-	2238-	2239-	2240-	36.0	0.050	36.0	0.500	14.4	2.010
0.68	0.813	[20.65]	0.400	[10.16]	1.013	[25.73]	2241-	2242-	2243-	2244-	2245-	2246-	36.0	0.061	36.0	0.610	14.0	2.380
0.82	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	2247-	2248-	2249-	2250-	2251-	2252-	36.0	0.074	36.0	0.740	12.0	2.460
1.0	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	2253-	2254-	2255-	2256-	2257-	2258-	36.0	0.09	36.0	0.900	10.0	2.500
1.2	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	2259-	2260-	2261-	2262-	2263-	2264-	36.0	0.11	36.0	1.080	9.1	2.730
1.5	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	2265-	2266-	2267-	2268-	2269-	2270-	36.0	0.14	36.0	1.350	7.7	2.900
1.8	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	2271-	2272-	2273-	2274-	2275-	2276-	36.0	0.16	36.0	1.620	6.6	3.000
2.0	1.125	[28.58]	0.500	[12.70]	1.325	[33.66]	2277-	2278-	2279-	2280-	2281-	2282-	36.0	0.18	36.0	1.800	6.2	3.100
2.2	1.125	[28.58]	0.500	[12.70]	1.325	[33.66]	2283-	2284-	2285-	2286-	2287-	2288-	36.0	0.20	36.0	1.980	5.8	3.200
2.7	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	2289-	2290-	2291-	2292-	2293-	2294-	36.0	0.24	36.0	2.430	5.0	3.340
3.0	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	2295-	2296-	2297-	2298-	2299-	2300-	36.0	0.27	36.0	2.700	4.5	3.400
3.3	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	2301-	2302-	2303-	2304-	2305-	2306-	36.0	0.30	36.0	2.970	4.2	3.500
3.9	1.375	[34.93]	0.562	[14.27]	1.575	[40.01]	2307-	2308-	2309-	2310-	2311-	2312-	36.0	0.35	36.0	3.510	3.7	3.600
4.7	1.375	[34.93]	0.670	[17.02]	1.575	[40.01]	2313-	2314-	2315-	2316-	2317-	2318-	36.0	0.42	31.0	3.600	3.1	3.600
5.0	1.375	[34.93]	0.670	[17.02]	1.575	[40.01]	2319-	2320-	2321-	2322-	2323-	2324-	36.0	0.45	29.0	3.600	2.9	3.600
5.6	1.375	[34.93]	0.670	[17.02]	1.575	[40.01]	2325-	2326-	2327-	2328-	2329-	2330-	36.0	0.50				

CRH31, CRH32, CRH33, CHR34

MIL-PRF-83421/6

Type 871P

ELECTRICAL CHARACTERISTICS, DIMENSIONS, AND DASH NUMBERS

Capacitance (μF)	Dimensions						DASH NUMBERS 2/						AC Ratings (sinusoidal operation -65° to 85°C)***					
	A ±0.030 (1.57 mm)		B ±0.020 -0.010 (+0.51 -0.25 mm)		D max		Capacitance tolerance value (in %)						0 to 400Hz		4 KHz		40 KHz	
	Inches	(mm)	Inches	(mm)	Inches	(mm)	±0.25	±0.5	±1	±2	±5	±10	Volts	Amp.	Volts	Amp.	Volts	Amp.
CRH33 - 100 VOLTS (DC RATING)																		
0.001	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3001-	3002-	3003-	3004-	3005-	3006-	60.0	0.001	60.0	0.002	60.0	0.015
0.0012	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3007-	3008-	3009-	3010-	3011-	3012-	60.0	0.001	60.0	0.002	60.0	0.018
0.0015	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3013-	3014-	3015-	3016-	3017-	3018-	60.0	0.001	60.0	0.002	60.0	0.022
0.0018	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3019-	3020-	3021-	3022-	3023-	3024-	60.0	0.001	60.0	0.003	60.0	0.027
0.002	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3025-	3026-	3027-	3028-	3029-	3030-	60.0	0.001	60.0	0.003	60.0	0.030
0.0022	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3031-	3032-	3033-	3034-	3035-	3036-	60.0	0.001	60.0	0.003	60.0	0.033
0.0027	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3037-	3038-	3039-	3040-	3041-	3042-	60.0	0.001	60.0	0.004	60.0	0.041
0.0033	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3043-	3044-	3045-	3046-	3047-	3048-	60.0	0.001	60.0	0.005	60.0	0.050
0.0039	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3049-	3050-	3051-	3052-	3053-	3054-	60.0	0.001	60.0	0.006	60.0	0.058
0.0047	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3055-	3056-	3057-	3058-	3059-	3060-	60.0	0.001	60.0	0.007	60.0	0.071
0.005	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3061-	3062-	3063-	3064-	3065-	3066-	60.0	0.001	60.0	0.008	60.0	0.075
0.0056	0.500	(12.70)	0.170	(4.32)	0.700	(17.78)	3067-	3068-	3069-	3070-	3071-	3072-	60.0	0.001	60.0	0.008	60.0	0.084
0.0068	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	3073-	3074-	3075-	3076-	3077-	3078-	60.0	0.001	60.0	0.010	60.0	0.10
0.0082	0.562	(14.27)	0.170	(4.32)	0.762	(19.35)	3079-	3080-	3081-	3082-	3083-	3084-	60.0	0.001	60.0	0.012	60.0	0.12
0.01	0.687	(17.45)	0.170	(4.32)	0.887	(22.53)	3085-	3086-	3087-	3088-	3089-	3090-	60.0	0.002	60.0	0.015	60.0	0.15
0.012	0.687	(17.45)	0.170	(4.32)	0.887	(22.53)	3091-	3092-	3093-	3094-	3095-	3096-	60.0	0.002	60.0	0.018	59.0	0.18
0.015	0.687	(17.45)	0.170	(4.32)	0.887	(22.53)	3097-	3098-	3099-	3100-	3101-	3102-	60.0	0.002	60.0	0.022	58.0	0.22
0.018	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	3103-	3104-	3105-	3106-	3107-	3108-	60.0	0.003	60.0	0.027	57.0	0.26
0.02	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	3109-	3110-	3111-	3112-	3113-	3114-	60.0	0.003	60.0	0.030	55.0	0.28
0.022	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	3115-	3116-	3117-	3118-	3119-	3120-	60.0	0.003	60.0	0.033	53.0	0.29
0.027	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	3121-	3122-	3123-	3124-	3125-	3126-	60.0	0.004	60.0	0.041	51.0	0.34
0.033	0.687	(17.45)	0.193	(4.90)	0.887	(22.53)	3127-	3128-	3129-	3130-	3131-	3132-	60.0	0.005	60.0	0.050	50.0	0.41
0.039	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	3133-	3134-	3135-	3136-	3137-	3138-	60.0	0.006	60.0	0.059	48.0	0.47
0.047	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	3139-	3140-	3141-	3142-	3143-	3144-	60.0	0.007	60.0	0.070	47.0	0.55
0.05	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	3145-	3146-	3147-	3148-	3149-	3150-	60.0	0.008	60.0	0.075	46.0	0.58
0.056	0.687	(17.45)	0.235	(5.97)	0.887	(22.53)	3151-	3152-	3153-	3154-	3155-	3156-	60.0	0.008	60.0	0.084	46.0	0.64
0.068	0.813	(20.65)	0.235	(5.97)	1.013	(25.73)	3157-	3158-	3159-	3160-	3161-	3162-	60.0	0.010	60.0	0.10	42.0	0.71
0.082	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	3163-	3164-	3165-	3166-	3167-	3168-	60.0	0.012	60.0	0.12	38.0	0.78
0.1	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	3169-	3170-	3171-	3172-	3173-	3174-	60.0	0.015	60.0	0.15	36.0	0.90
0.12	0.687	(17.45)	0.312	(7.92)	0.887	(22.53)	3175-	3176-	3177-	3178-	3179-	3180-	60.0	0.018	60.0	0.18	35.0	1.05
0.15	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	3181-	3182-	3183-	3184-	3185-	3186-	60.0	0.022	60.0	0.23	33.0	1.24
0.18	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	3187-	3188-	3189-	3190-	3191-	3192-	60.0	0.027	60.0	0.27	31.0	1.40
0.20	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	3193-	3194-	3195-	3196-	3197-	3198-	60.0	0.030	60.0	0.30	30.0	1.50
0.22	0.813	(20.65)	0.312	(7.92)	1.013	(25.73)	3199-	3200-	3201-	3202-	3203-	3204-	60.0	0.033	60.0	0.33	27.0	1.50
0.27	1.063	(27.00)	0.312	(7.92)	1.263	(32.08)	3205-	3206-	3207-	3208-	3209-	3210-	60.0	0.041	60.0	0.41	24.0	1.62
0.33	1.063	(27.00)	0.312	(7.92)	1.263	(32.08)	3211-	3212-	3213-	3214-	3215-	3216-	60.0	0.050	60.0	0.50	23.0	1.90
0.39	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	3217-	3218-	3219-	3220-	3221-	3222-	60.0	0.058	60.0	0.59	22.0	2.15
0.47	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	3223-	3224-	3225-	3226-	3227-	3228-	60.0	0.071	60.0	0.71	21.0	2.47
0.50	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	3229-	3230-	3231-	3232-	3233-	3234-	60.0	0.075	60.0	0.75	20.0	2.50
0.56	1.063	(27.00)	0.400	(10.16)	1.263	(32.08)	3235-	3236-	3237-	3238-	3239-	3240-	60.0	0.084	60.0	0.84	19.0	2.64
0.68	1.125	(28.58)	0.500	(12.70)	1.325	(33.66)	3241-	3242-	3243-	3244-	3245-	3246-	60.0	0.10	60.0	1.02	16.0	2.72
0.82	1.125	(28.58)	0.500	(12.70)	1.325	(33.66)	3247-	3248-	3249-	3250-	3251-	3252-	60.0	0.12	60.0	1.23	14.0	2.87
1.0	1.125	(28.58)	0.562	(14.27)	1.325	(33.66)	3253-	3254-	3255-	3256-	3257-	3258-	60.0	0.15	60.0	1.50	12.0	3.00
1.2	1.125	(28.58)	0.562	(14.27)	1.325	(33.66)	3259-	3260-	3261-	3262-	3263-	3264-	60.0	0.18	60.0	1.80	11.0	3.25
1.5	1.375	(34.93)	0.562	(14.27)	1.575	(40.01)	3265-	3266-	3267-	3268-	3269-	3270-	60.0	0.23	60.0	2.26	10.0	3.75
1.8	1.375	(34.93)	0.670	(17.02)	1.575	(40.01)	3271-	3272-	3273-	3274-	3275-	3276-	60.0	0.27	60.0	2.70	8.5	3.96
2.0	1.375	(34.93)	0.670	(17.02)	1.575	(40.01)	3277-	3278-	3279-	3280-	3281-	3282-	60.0	0.30	60.0	3.00	8.1	4.10
2.2	1.375	(34.93)	0.670	(17.02)	1.575	(40.01)	3283-	3284-	3285-	3286-	3287-	3288-	60.0	0.33	60.0	3.31	7.5	4.12
2.7	1.875	(47.63)	0.670	(17.02)	2.075	(52.71)	3289-	3290-	3291-	3292-	3293-	3294-	60.0	0.41	60.0	4.05	6.5	4.40
3.0	1.875	(47.63)	0.670	(17.02)	2.075	(52.71)	3295-	3296-	3297-	3298-	3299-	3300-	60.0	0.45	60.0	4.51	6.0	4.51
3.3	1.875	(47.63)	0.670	(17.02)	2.075	(52.71)	3301-	3302-	3303-	3304-	3305-	3306-	60.0	0.50	55.0	4.73	5.5	4.55
3.9	1.875	(47.63)	0.750	(19.05)	2.075	(52.71)	3307-	3308-	3309-	3310-	3311-	3312-	60.0	0.59	49.0	4.90	5.0	4.90
4.7	1.875	(47.63)	0.750	(19.05)	2.075	(52.71)	3313-	3314-	3315-	3316-	3317-	3318-	60.0	0.71	43.0	5.0	4.3	5.0
5.0	1.875	(47.63)	0.750	(19.05)	2.075	(52.71)	3319-	3320-	3321-	3322-	3323-	3324-	60.0	0.75	40.0	5.0	4.0	5.0
5.6	1.875	(47.63)	0.750	(19.05)	2.075	(52.71)	3325-	3326-	3327-	3328-	3329-	3330-	60.0	0.84	36.0	5.0	3.6	5.0
6.8	2.375	(60.33)	1.000	(25.4)	2.575	(65.41)	3331-	3332-	3333-	3334-	3335-	3336-	60.0	1.02	29.0	5.0	3.0	5.0
8.0	2.375	(60.33)	1.000	(25.4)	2.575	(65.41)	3337-	3338-	3339-	3340-	3341-	3342-	60.0	1.20	25.0	5.0	2.5	5.0
8.2	2.375	(60.33)	1.000	(25.4)	2.575	(65.41)	3343-	3344-	3345-	3346-	3347-	3348-	60.0	1.23	24.4	5.0	2.4	5.0
10.0	2.375	(60.33)	1.000	(25.4)	2.575	(65.41)	3349-	3350-	3351-	3352-	3353-	3354-	60.0	1.50	20.0	5.0	2.0	5.0

* A and B dimensions are bare case dimensions.

** The complete dash number will include the applicable FR level symbol (M, P, R, or S) as a suffix.

*** For +100°C operation, linearly derate +85°C rating by 50 percent.

ELECTRICAL CHARACTERISTICS, DIMENSIONS, AND DASH NUMBERS

Capacitance (μ F)	Dimensions*						DASH NUMBERS**						AC Ratings (sinusoidal operation -65° to +85°C)***					
	A $\pm$ 0.030 (1.57 mm)		B $\pm$ 0.020-0.010(+0.51-0.25 mm)		D max		Capacitance tolerance value (in %)						0 to 400Hz		4 KHz		40 KHz	
	Inches	(mm)	Inches	(mm)	Inches	(mm)	$\pm$ 0.25	$\pm$ 0.5	$\pm$ 1	$\pm$ 2	$\pm$ 5	$\pm$ 10	Volts	Amp.	Volts	Amp.	Volts	Amp.
CRH34 - 200 VOLTS (DC RATING)																		
0.001	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4001-	4002-	4003-	4004-	4005-	4006-	120	.001	120	0.003	80	0.020
0.0012	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4007-	4008-	4009-	4010-	4011-	4012-	120	.001	120	0.004	80	0.024
0.0015	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4013-	4014-	4015-	4016-	4017-	4018-	120	.001	120	0.004	80	0.030
0.0018	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4019-	4020-	4021-	4022-	4023-	4024-	120	.001	120	0.005	80	0.036
0.002	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4025-	4026-	4027-	4028-	4029-	4030-	120	.001	120	0.006	80	0.040
0.0022	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4031-	4032-	4033-	4034-	4035-	4036-	120	.001	120	0.007	80	0.044
0.0027	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4037-	4038-	4039-	4040-	4041-	4042-	120	.001	120	0.008	80	0.054
0.0033	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4043-	4044-	4045-	4046-	4047-	4048-	120	.001	120	0.010	80	0.066
0.0039	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4049-	4050-	4051-	4052-	4053-	4054-	120	.001	120	0.012	80	0.078
0.0047	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4055-	4056-	4057-	4058-	4059-	4060-	120	.001	120	0.014	80	0.094
0.005	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4061-	4062-	4063-	4064-	4065-	4066-	120	.002	120	0.015	80	0.10
0.0056	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4067-	4068-	4069-	4070-	4071-	4072-	120	.002	120	0.017	80	0.11
0.0068	0.562	[14.27]	0.170	[4.32]	0.762	[19.35]	4073-	4074-	4075-	4076-	4077-	4078-	120	.002	120	0.020	80	0.14
0.0082	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	4079-	4080-	4081-	4082-	4083-	4084-	120	.002	120	0.025	80	0.16
0.01	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	4085-	4086-	4087-	4088-	4089-	4090-	120	.003	120	0.030	80	0.20
0.012	0.562	[14.27]	0.193	[4.90]	0.762	[19.35]	4091-	4092-	4093-	4094-	4095-	4096-	120	.004	120	0.036	78	0.23
0.015	0.562	[14.27]	0.235	[5.97]	0.762	[19.35]	4097-	4098-	4099-	4100-	4101-	4102-	120	.004	120	0.045	76	0.29
0.018	0.687	[17.45]	0.235	[5.97]	0.887	[22.53]	4103-	4104-	4105-	4106-	4107-	4108-	120	.005	120	0.054	74	0.33
0.02	0.687	[17.45]	0.235	[5.97]	0.887	[22.53]	4109-	4110-	4111-	4112-	4113-	4114-	120	.006	120	0.060	71	0.36
0.022	0.687	[17.45]	0.235	[5.97]	0.887	[22.53]	4115-	4116-	4117-	4118-	4119-	4120-	120	.007	120	0.066	68	0.37
0.027	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	4121-	4122-	4123-	4124-	4125-	4126-	120	.008	120	0.081	65	0.44
0.033	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	4127-	4128-	4129-	4130-	4131-	4132-	120	.010	120	0.099	62	0.51
0.039	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	4133-	4134-	4135-	4136-	4137-	4138-	120	.012	120	0.12	60	0.59
0.047	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	4139-	4140-	4141-	4142-	4143-	4144-	120	.014	120	0.14	57	0.67
0.05	0.687	[17.45]	0.312	[7.92]	0.887	[22.53]	4145-	4146-	4147-	4148-	4149-	4150-	120	.015	120	0.15	56	0.70
0.056	0.813	[20.65]	0.312	[7.92]	1.013	[20.65]	4151-	4152-	4153-	4154-	4155-	4156-	120	.017	120	0.17	56	0.78
0.068	0.813	[20.65]	0.312	[7.92]	1.013	[20.65]	4157-	4158-	4159-	4160-	4161-	4162-	120	.020	120	0.20	50	0.85
0.082	0.813	[20.65]	0.312	[7.92]	1.013	[20.65]	4163-	4164-	4165-	4166-	4167-	4168-	120	.025	120	0.25	44	0.90
0.1	0.813	[20.65]	0.312	[7.92]	1.013	[20.65]	4169-	4170-	4171-	4172-	4173-	4174-	120	.030	120	0.30	42	1.10
0.12	0.813	[20.65]	0.312	[7.92]	1.013	[20.65]	4175-	4176-	4177-	4178-	4179-	4180-	120	.036	120	0.36	40	1.20
0.15	1.063	[27.00]	0.400	[10.16]	1.263	[32.08]	4181-	4182-	4183-	4184-	4185-	4186-	120	.045	120	0.45	36	1.34
0.18	1.375	[34.93]	0.400	[10.16]	1.575	[40.01]	4187-	4188-	4189-	4190-	4191-	4192-	120	.054	120	0.54	34	1.54
0.20	1.375	[34.93]	0.400	[10.16]	1.575	[40.01]	4193-	4194-	4195-	4196-	4197-	4198-	120	.060	120	0.60	33	1.65
0.22	1.375	[34.93]	0.400	[10.16]	1.575	[40.01]	4199-	4200-	4201-	4202-	4203-	4204-	120	.066	120	0.66	32	1.76
0.27	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4205-	4206-	4207-	4208-	4209-	4210-	120	.081	120	0.81	29	1.96
0.33	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4211-	4212-	4213-	4214-	4215-	4216-	120	.099	120	0.99	28	2.31
0.39	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4217-	4218-	4219-	4220-	4221-	4222-	120	.12	120	1.17	27	2.63
0.47	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4223-	4224-	4225-	4226-	4227-	4228-	120	.14	120	1.41	26	3.06
0.50	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4229-	4230-	4231-	4232-	4233-	4234-	120	.15	120	1.50	25	3.13
0.56	1.375	[34.93]	0.500	[12.70]	1.575	[40.01]	4235-	4236-	4237-	4238-	4239-	4240-	120	.17	120	1.61	23	3.17
0.68	1.375	[34.93]	0.562	[14.27]	1.575	[40.01]	4241-	4242-	4243-	4244-	4245-	4246-	120	.20	120	1.87	20	3.40
0.82	1.875	[47.63]	0.562	[14.27]	2.075	[52.71]	4247-	4248-	4249-	4250-	4251-	4252-	120	.25	120	2.05	18	3.70
1.0	1.875	[47.63]	0.562	[14.27]	2.075	[52.71]	4253-	4254-	4255-	4256-	4257-	4258-	120	.30	120	2.25	15	3.75
1.2	1.875	[47.63]	0.562	[14.27]	2.075	[52.71]	4259-	4260-	4261-	4262-	4263-	4264-	120	.36	120	2.61	13.5	4.05
1.5	1.875	[47.63]	0.670	[17.02]	2.075	[52.71]	4265-	4266-	4267-	4268-	4269-	4270-	120	.45	120	3.20	12	4.50
1.8	1.875	[47.63]	0.750	[19.05]	2.075	[52.71]	4271-	4272-	4273-	4274-	4275-	4276-	120	.54	110	3.74	11	5.00
2.0	1.875	[47.63]	0.750	[19.05]	2.075	[52.71]	4277-	4278-	4279-	4280-	4281-	4282-	120	.60	100	4.05	10	5.00
2.2	1.875	[47.63]	0.750	[19.05]	2.075	[52.71]	4283-	4284-	4285-	4286-	4287-	4288-	120	.66	90.5	4.20	9.1	5.00
2.5	1.875	[47.63]	0.750	[19.05]	2.075	[52.71]	4289-	4290-	4291-	4292-	4293-	4294-	120	.75	80	4.31	8	5.00
2.7	1.875	[47.63]	0.750	[19.05]	2.075	[52.71]	4295-	4296-	4297-	4298-	4299-	4300-	120	.81	77	4.60	7.7	5.20
3.0	1.875	[47.63]	1.000	[25.40]	2.075	[52.71]	4301-	4302-	4303-	4304-	4305-	4306-	120	.90	70	5.04	7	5.27
3.3	1.875	[47.63]	1.000	[25.40]	2.075	[52.71]	4307-	4308-	4309-	4310-	4311-	4312-	120	.99	65	5.21	6.5	5.36
3.9	2.375	[60.33]	1.000	[25.40]	2.575	[65.41]	4313-	4314-	4315-	4316-	4317-	4318-	120	1.20	55	5.39	5.5	5.40

* A and B dimensions are bare case dimensions.

** The complete dash number will include the applicable FR level symbol (M, P, R, or S) as a suffix.

*** For +100°C operation, linearly derate +85°C rating by 50 percent.

Technical Informations

TERMINAL

The terminal is identified by a single letter in accordance with table below.

Symbol	Type of terminal
A	Axial wire lead
B	Solder lug (nonremovable)
C	Threaded stud and nuts
D and H	Pillar insulator for use at altitudes up to 7,500 feet (22.8 inches of mercury)
E	Pillar insulator for use at altitudes up to 50,000 feet (3.4 inches of mercury)
R	Radial wire-lead
L	Lugs

CHARACTERISTIC

The characteristic is identified by a single letter in accordance with table below.

Characteristic	Values of characteristics								
	E	F	G	K (2)	M	P	Q (4)	T	V
High ambient test temperature $\pm 3^{\circ}\text{C}$ (1)	+85°C	+85°C	+85°C	+125°C	+85°C	+65°C	+125°C	+170°C	+125°C
Low ambient test temperature +0°C, -5°C	-65°C	-55°C	-55°C	-65°C	-65°C	-65°C	-55°C	-65°C	-55°C
Life-test dc voltage, percent of the dc voltage rating: Watt-second group:									
I (0.5 watt-second and less)	140	140	140	140	140	140	150	140	150
II (0.5+ to 5 watt-seconds)	140	130	130	140 (3)	-	-	-	-	-
III (5+ to 50 watt-seconds)	140	110	110	140	-	-	-	-	-
IV (greater than 50 watt-seconds)	140	90	90	140	-	-	-	-	-
Flashpoint of impregnant of filling compound (°C)	+142°C	+135°C	+135°C	+142°C	+142°C	+142°C	+142°C	+217°C	+142°C

(1) For characteristic K, voltage derating may be necessary at the high ambient test temperature.

(2) For tubular units of characteristic K rated at 1,000 volts dc, life test voltage is 1,200 volts.

(3) For tubular units of characteristic K in watt-seconds group II, use 130 percent of the dc voltage at +40°C for the life-test dc voltage.

(4) Characteristic Q capacitors are no longer available

Characteristic	Construction		Operating temperature range
	Dielectric material	Electrode	
K	Polypropylene	Foil	-55°C to +105°C
L	Polypropylene	Metallized polypropylene	-55°C to +105°C
M	Polyethylene terephthalate	Foil	-55°C to +85°C
N	Polyethylene terephthalate	Metallized polyethylene terephthalate	-55°C to +85°C
Q	Polycarbonate	Foil	-55°C to +125°C (1)
R	Polycarbonate	Metallized polycarbonate	-55°C to +125°C (1)
U	Polyphenylene sulfide	Metallized polyphenylene sulfide	-55°C to +125°C (1)
V	Polyphenylene sulfide	Foil	-55°C to +125°C (1)

(1) For operation at +125°C, characteristics Q, R, U and V capacitors are voltage derated (see table below)

Symbol	DC voltage rating at +85°C (1)	Characteristics Q and V DC voltage rating at +125°C	Characteristics R and U DC voltage rating at +125°C
A	50 V	33.3 V	25 V
B	100 V	66.7 V	50 V
C	200 V	133.3 V	100 V
D	300 V	200.0 V	150 V
E	400 V	266.7 V	200 V
F	600 V	400.0 V	300 V
G	75 V	50.0 V	37.5 V
H	150 V	100.0 V	75 V
J	25 V	16.7 V	12.5 V
K	250 V	166.7 V	125 V
L	800 V	533.3 V	400 V

(1) DC voltage rating for characteristics K and L at +105°C are the same as those at +85°C.

VOLTAGE

The dc voltage rating for continuous operation at the high ambient test temperature specified in table III (except for characteristic K which is for +85°C operation), is identified by a single letter in accordance with table below.

Symbol	DC voltage rating (Volts)	Symbol	DC voltage rating (Volts)
Z	30 V	K	2,500 V
A	50 V	L	3,000 V
B	100 V	M	4,000 V
C	200 V	N	5,000 V
D	300 V	P	6,000 V
E	400 V	R	7,500 V
F	600 V	S	10,000 V
G	1,000 V	T	12,500 V
H	1,500 V	U	15,000 V
J	2,000 V		

CAPACITANCE TOLERANCE

The capacitance tolerance in percent is identified by a single letter in accordance with table below.

Symbol	Capacitance tolerance
C	$\pm 0.25\%$
D	$\pm 0.5\%$
F	$\pm 1\%$
G	$\pm 2\%$
J	$\pm 5\%$
K	$\pm 10\%$
M	$\pm 20\%$

CIRCUIT AND VOLTAGE CODES

Code	Circuit	Voltage (V)
A	1	50
B	3	50
C	1	100
D	3	100
E	1	200
F	3	200
G	1	400
H	3	400
J	1	600
K	3	600
L	1	300
M	3	300

Specifications, standards, and handbooks.

The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract (see 6.2).

FEDERAL STANDARDS

FED-STD-H28 - Screw-Thread Standards for Federal Services

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-C-18312 - Capacitors, Fixed, Metallized (Paper, Paper-Plastic, or Plastic Film) Dielectric, Direct Current (Hermetically Sealed in Metal Cases), General Specification for

MIL-PRF-83421/1 - Capacitors, Fixed, Metallized, Plastic Film Dielectric, DC and AC, Hermetically Sealed In Metal Cases, Established Reliability,

MIL-PRF-83421/2 - Capacitor, Fixed, Metallized Plastic Film, Dielectric, (DC, AC, or DC and AC), Hermetically Sealed in Metal Cases, Established Reliability,

MIL-PRF-83421/6 - Capacitor, Fixed, Metallized Plastic Film Dielectric, DC and AC, Hermetically Sealed in Metal Cases, Established Reliability,

MIL-PRF-11693/7 - Capacitors, Feed Through, Radio-Interference Reduction, DC (Hermetically Sealed in Metal Cases), Established and Non-Established Reliability,

MIL-PRF-83421/6 - Capacitors, Fixed, Metallized Plastic Film Dielectric, DC and AC, Hermetically Sealed In Metal Cases, Established Reliability.

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-202 - Test Methods Standard Electronic and Electrical Component Parts

MIL-STD-202-101 - Method 101, Salt Atmosphere (Corrosion)

MIL-STD-202-104 - Method 104, Immersion

MIL-STD-202-105 - Method 105, Barometric Pressure (Reduced)

MIL-STD-202-106 - Method 106, Moisture Resistance

MIL-STD-202-107 - Method 107, Thermal Shock

MIL-STD-202-108 - Method 108, Life (at Elevated Ambient Temperature)

MIL-STD-202-112 - Method 112, Seal

MIL-STD-202-201 - Method 201, Vibration

MIL-STD-202-204 - Method 204, Vibration, High Frequency

MIL-STD-202-208 - Method 208, Solderability

MIL-STD-202-209 - Method 209, Radiographic Inspection

MIL-STD-202-210 - Method 210, Resistance to Soldering Heat

MIL-STD-202-211 - Method 211, Terminal Strength

MIL-STD-202-213 - Method 213, Shock (Specified Pulse)

MIL-STD-202-214 - Method 214, Random Vibration

MIL-STD-202-215 - Method 215, Resistance to Solvents

MIL-STD-202-301 - Method 301, Dielectric Withstanding Voltage

MIL-STD-202-302 - Method 302, Insulation Resistance

MIL-STD-202-305 - Method 305, Capacitance

MIL-STD-220 - Method of Insertion Loss Measurement

MIL-STD-690 - Failure Rate Sampling Plans and Procedures

MIL-STD-790 - Standard Practice for Established Reliability and High Reliability Qualified Products List (QPL) Systems for Electrical, Electronic, and Fiber Optic Parts Specifications

MIL-STD-810 - Environmental Engineering Considerations and Laboratory Tests

MIL-STD-1276 - Leads for Electronic Component Parts

MIL-STD-1285 - Marking of Electrical and Electronic Parts



Government Documents



Non-Government publications.

The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents are those listed in the solicitation or contract.

ASTM INTERNATIONAL (ASTM)

ASTM D92 - Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester

SAE INTERNATIONAL (SAE)

SAE EIA-554-1 - Assessment of Average Outgoing Quality Levels in Parts Per Million (PPM)

ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES (IPC)

IPC/JEDEC J-STD-002 - Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

ISO/IEC 17025 - General Requirements for the Competence of Testing and Calibration laboratories

ISO 10012 - Measurement Management Systems - Requirements for Measurement Processes and Measuring Equipment

NATIONAL CONFERENCE OF STANDARDS LABORATORIES (NCSL)

NCSL Z540.3 - Requirements for the Calibration of Measuring and Test Equipment

SAE INTERNATIONAL (SAE)

SAE EIA-554-1 - Assessment of Average Outgoing Quality Levels in Parts per Million (PPM)

SOLID STATE TECHNOLOGY ASSOCIATION (JEDEC)

JEDEC JESD557 - Statistical Process Control Systems

Order of precedence.

Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein (except for related specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.