

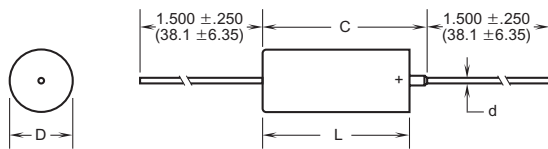
# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## 125 °C, Hermetically Sealed, Axial Leaded, Solid Tantalum Capacitors



Type CSR13 (MIL-C-39003/01) military grade, axial leaded, solid tantalum capacitors are hermetically sealed for rugged environmental applications. They are miniature in size and are available in graded failure rate levels.

### Outline Drawing



### Highlights

- Hermetically Sealed
- Graded Failure Rates
- Low DC Leakage
- Long Shelf Life
- Low DF
- Temperature Stable
- Frequency Stable

### Specifications

<b>Capacitance Range:</b>	.0047 to 330 $\mu$ F
<b>Voltage Range:</b>	6 to 100 WVdc at +85 °C
<b>Capacitance Tolerance:</b>	$\pm$ 10%, $\pm$ 20%, ( $\pm$ 5% by special order)
<b>Operating Temperature Range:</b>	-55 to +125 °C
<b>Reverse Voltage (Non-continuous)</b>	15% of rated voltage @ +25 °C 5% of rated voltage @ +85 °C 1% of rated voltage @ +125 °C
<b>DC Leakage:</b>	At +25 °C – See ratings limit At +85 °C – 10 x ratings limit At +125 °C – 12.5 x ratings limit
<b>Capacitance Change Maximum:</b>	-10% @ -55°C +8% @ +85 °C +12% @ +125 °C

**Maximum Power Dissipation @ +25 °C:**

Case Code	Watts
A	.090
B	.100
C	.125
D	.180

### Case Sizes

Case Code	Uninsulated		Insulated		C Maximum	d $\pm$ .001 ( $\pm$ .03)	Quantity Per Reel
	D $\pm$ .005 ( $\pm$ .13)	L $\pm$ .031 ( $\pm$ .79)	D $\pm$ .010 ( $\pm$ .25)	L $\pm$ .031 ( $\pm$ .79)			
A	.125 (3.18)	.250 (6.35)	.135 (3.43)	.286 (7.26)	.422 (10.72)	.020 (.51)	3,500
B	.175 (4.45)	.438 (11.13)	.185 (4.70)	.474 (12.04)	.610 (15.49)	.020 (.51)	2,500
C	.279 (7.09)	.650 (16.51)	.289 (7.34)	.686 (17.42)	.822 (20.88)	.025 (.64)	500
D	.341 (8.66)	.750 (19.05)	.351 (8.92)	.786 (19.96)	.922 (23.42)	.025 (.64)	400

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap ( $\mu$ F)	Catalog Part Number	Cap Tol. $\pm$ (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
<b>6 WVdc @ +85 °C — 4 WVdc @ +125 °C</b>												
5.6	CSR13B565K*	10	A	0.3	4	2241	2481	2721	2961	6002	7002	8002
6.8	CSR13B685K*	10	A	0.3	6	2242	2482	2722	2962	6004	7004	8004
6.8	CSR13B685M*	20	A	0.3	6	2243	2483	2723	2963	6005	7005	8005
47	CSR13B476K*	10	B	1.5	6	2244	2484	2724	2964	6007	7007	8007
47	CSR13B476M*	20	B	1.5	6	2245	2485	2725	2965	6008	7008	8008
56	CSR13B566K*	10	B	1.5	6	2246	2486	2726	2966	6010	7010	8010
150	CSR13B157K*	10	C	4.5	6	2247	2487	2727	2967	6012	7012	8012
150	CSR13B157M*	20	C	4.5	6	2248	2488	2728	2968	6013	7013	8013
180	CSR13B187K*	10	C	5.5	6	2249	2489	2729	2969	6015	7015	8015
270	CSR13B277K*	10	D	6.0	8	2250	2490	2730	2970	6017	7017	8017
330	CSR13B337K*	10	D	7.5	8	2251	2491	2731	2971	6019	7019	8019
330	CSR13B337M*	20	D	7.5	8	2252	2492	2732	2972	6020	7020	8020
<b>10 WVdc @ +85 °C — 7 WVdc @ +125 °C</b>												
3.9	CSR13C395K*	10	A	0.3	4	2253	2493	2733	2973	6022	7022	8022
4.7	CSR13C475K*	10	A	0.4	4	2254	2494	2734	2974	6024	7024	8024
4.7	CSR13C475M*	20	A	0.4	4	2255	2495	2735	2975	6025	7025	8025
27	CSR13C276K*	10	B	2.0	6	2256	2496	2736	2976	6027	7027	8027
33	CSR13C336K*	10	B	2.0	6	2257	2497	2737	2977	6029	7029	8029
33	CSR13C336M*	20	B	2.0	6	2258	2498	2738	2978	6030	7030	8030
39	CSR13C396K*	10	B	2.0	6	2259	2499	2739	2979	6032	7032	8032
82	CSR13C826K*	10	C	3.0	6	2260	2500	2740	2980	6034	7034	8034
100	CSR13C107K*	10	C	5.0	6	2261	2501	2741	2981	6036	7036	8036
100	CSR13C107M*	20	C	5.0	6	2262	2502	2742	2982	6037	7037	8037
120	CSR13C127K*	10	C	6.0	6	2263	2503	2743	2983	6039	7039	8039
180	CSR13C187K*	10	D	9.0	6	2264	2504	2744	2984	6041	7041	8041
220	CSR13C227K*	10	D	10.0	8	2265	2505	2745	2985	6043	7043	8043
220	CSR13C227M*	20	D	10.0	8	2266	2506	2746	2986	6044	7044	8044
<b>15 WVdc @ +85 °C — 10 WVdc @ +125 °C</b>												
2.7	CSR13D275K*	10	A	0.3	4	2267	2507	2747	2987	6046	7046	8046
3.3	CSR13D335K*	10	A	0.4	4	2268	2508	2748	2988	6048	7048	8048
3.3	CSR13D335M*	20	A	0.4	4	2269	2509	2749	2989	6049	7049	8049
18	CSR13D186K*	10	B	2.0	6	2270	2510	2750	2990	6051	7051	8051
22	CSR13D226K*	10	B	2.0	6	2271	2511	2751	2991	6053	7053	8053
22	CSR13D226M*	20	B	2.0	6.0	2272	2512	2752	2992	6054	7054	8054
56	CSR13D566K*	10	C	4.0	6.0	2273	2513	2753	2993	6056	7056	8056
68	CSR13D686K*	10	C	5.0	6.0	2274	2514	2754	2994	6058	7058	8058
68	CSR13D686M*	20	C	5.0	6.0	2275	2515	2755	2995	6059	7059	8059
120	CSR13D127K*	10	D	6.0	6.0	2276	2516	2756	2996	6061	7061	8061
150	CSR13D157K*	10	D	8.0	6.0	2277	2517	2757	2997	6063	7063	8063
150	CSR13D157M*	20	D	8.0	6.0	2278	2518	2758	2998	6064	7064	8064

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.  
 Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

\* Failure rate level indicator  
(M, P, R, S)

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap Cap ( $\mu$ F)	Catalog Part Number	Cap Tolerance (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
<b>20 WVdc @ +85 °C — 13 WVdc @ +125 °C</b>												
1.2	CSR13E125K*	10	A	0.3	6	2279	2519	2759	2999	6066	7066	8066
1.5	CSR13E155K*	10	A	0.3	6	2280	2520	2760	3000	6068	7068	8068
1.5	CSR13E155M*	20	A	0.3	6	2281	2521	2761	3001	6069	7069	8069
1.8	CSR13E185K*	10	A	0.3	6	2282	2522	2762	3002	6071	7071	8071
2.2	CSR13E225K*	10	A	0.4	6	2283	2523	2763	3003	6073	7073	8073
2.2	CSR13E225M*	20	A	0.4	6	2284	2524	2764	3004	6074	7074	8074
8.2	CSR13E825K*	10	B	1.0	6	2285	2525	2765	3005	6076	7076	8076
10	CSR13E106K*	10	B	1.0	6	2286	2526	2766	3006	6078	7078	8078
10	CSR13E106M*	20	B	1.0	6	2287	2527	2767	3007	6079	7079	8079
12	CSR13E126K*	10	B	1.0	6	2288	2528	2768	3008	6081	7081	8081
15	CSR13E156K*	10	B	2.0	6	2289	2529	2769	3009	6083	7083	8083
15	CSR13E156M*	20	B	2.0	6	2290	2530	2770	3010	6084	7084	8084
27	CSR13E276K*	10	C	2.5	6	2291	2531	2771	3011	6086	7086	8086
33	CSR13E336K*	10	C	3.0	6	2292	2532	2772	3012	6088	7088	8088
33	CSR13E336M*	20	C	3.0	6	2293	2533	2773	3013	6089	7089	8089
39	CSR13E396K*	10	C	3.0	6	2294	2534	2774	3014	6091	7091	8091
47	CSR13E476K*	10	C	4.5	6	2295	2535	2775	3015	6093	7093	8093
47	CSR13E476M*	20	C	4.5	6	2296	2536	2776	3016	6094	7094	8094
56	CSR13E566K*	10	D	5.5	6	2297	2537	2777	3017	6096	7096	8096
68	CSR13E686K*	10	D	6.0	6	2298	2538	2778	3018	6098	7098	8098
68	CSR13E686M*	20	D	6.0	6	2299	2539	2779	3019	6099	7099	8099
82	CSR13E826K*	10	D	6.0	6	2300	2540	2780	3020	6101	7101	8101
100	CSR13E107K*	10	D	10.0	6	2301	2541	2781	3021	6103	7103	8103
100	CSR13E107M*	20	D	10.0	6	2302	2542	2782	3022	6104	7104	8104
<b>35 WVdc @ +85 °C — 23 WVdc @ +125 °C</b>												
5.6	CSR13F565K*	10	B	1.0	4	2303	2543	2783	3023	6106	7106	8106
6.8	CSR13F685K*	10	B	1.5	4	2304	2544	2784	3024	6108	7108	8108
6.8	CSR13F685M*	20	B	1.5	4	2305	2545	2785	3025	6109	7109	8109
22.0	CSR13F226K*	10	C	4.0	4	2306	2546	2786	3026	6111	7111	8111
22.0	CSR13F226M*	20	C	4.0	4	2307	2547	2787	3027	6112	7112	8112
27.0	CSR13F276K*	10	D	4.5	4	2308	2548	2788	3028	6114	7114	8114
33.0	CSR13F336K*	10	D	5.5	4	2309	2549	2789	3029	6116	7116	8116
33.0	CSR13F336M*	20	D	5.5	4	2310	2550	2790	3030	6117	7117	8117
39.0	CSR13F396K*	10	D	6.0	4	2311	2551	2791	3031	6119	7119	8119
47.0	CSR13F476K*	10	D	6.0	4	2312	2552	2792	3032	6121	7121	8121
47.0	CSR13F476M*	20	D	8.0	4	2313	2553	2793	3033	6122	7122	8122
<b>50 WVdc @ +85 °C — 33 WVdc @ +125 °C</b>												
0.0047	CSR13G472K*	10	A	0.1	2	2314	2554	2794	3034	6124	7124	8124
0.0047	CSR13G472M*	20	A	0.1	2	2315	2555	2795	3035	6125	7125	8125
0.0056	CSR13G562K*	10	A	0.1	2	2316	2556	2796	3036	6127	7127	8127

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.

Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

\* Failure rate level indicator  
(M, P, R, S)

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap Cap ( $\mu$ F)	Catalog Part Number	Cap Tolerance (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
						50 WVdc @ +85 °C — 33 WVdc @ +125 °C						
0.0068	CSR13G682K*	10	A	0.1	2	2317	2557	2797	3037	6129	7129	8129
0.0068	CSR13G682M*	20	A	0.1	2	2318	2558	2798	3038	6130	7130	8130
0.0082	CSR13G822K*	10	A	0.1	2	2319	2559	2799	3039	6132	7132	8132
0.010	CSR13G103K*	10	A	0.1	2	2320	2560	2800	3040	6134	7134	8134
0.010	CSR13G103M*	20	A	0.1	2	2321	2561	2801	3041	6135	7135	8135
0.012	CSR13G123K*	10	A	0.1	2	2322	2562	2802	3042	6137	7137	8137
0.015	CSR13G153K*	10	A	0.1	2	2323	2563	2803	3043	6139	7139	8139
0.015	CSR13G153M*	20	A	0.1	2	2324	2564	2804	3044	6140	7140	8140
0.018	CSR13G183K*	10	A	0.1	2	2325	2565	2805	3045	6142	7142	8142
0.022	CSR13G223K*	10	A	0.1	2	2326	2566	2806	3046	6144	7144	8144
0.022	CSR13G223M*	20	A	0.1	2	2327	2567	2807	3047	6145	7145	8145
0.027	CSR13G273K*	10	A	0.1	2	2328	2568	2808	3048	6147	7147	8147
0.033	CSR13G333K*	10	A	0.1	2	2329	2569	2809	3049	6149	7149	8149
0.033	CSR13G333M*	20	A	0.1	2	2330	2570	2810	3050	6150	7150	8150
0.039	CSR13G393K*	10	A	0.1	2	2331	2571	2811	3051	6152	7152	8152
0.047	CSR13G473K*	10	A	0.1	2	2332	2572	2812	3052	6154	7154	8154
0.047	CSR13G473M*	20	A	0.1	2	2333	2573	2813	3053	6155	7155	8155
0.056	CSR13G563K*	10	A	0.1	2	2334	2574	2814	3054	6157	7157	8157
0.068	CSR13G683K*	10	A	0.1	2	2335	2575	2815	3055	6159	7159	8159
0.068	CSR13G683M*	20	A	0.1	2	2336	2576	2816	3056	6160	7160	8160
0.082	CSR13G823K*	10	A	0.1	2	2337	2577	2817	3057	6162	7162	8162
0.10	CSR13G104K*	10	A	0.3	2	2338	2578	2818	3058	6164	7164	8164
0.10	CSR13G104M*	20	A	0.3	2	2339	2579	2819	3059	6165	7165	8165
0.12	CSR13G124K*	10	A	0.3	2	2340	2580	2820	3060	6167	7167	8167
0.15	CSR13G154K*	10	A	0.3	2	2341	2581	2821	3061	6169	7169	8169
0.15	CSR13G154M*	20	A	0.3	2	2342	2582	2822	3062	6170	7170	8170
0.18	CSR13G184K*	10	A	0.3	2	2343	2583	2823	3063	6172	7172	8172
0.22	CSR13G224K*	10	A	0.3	2	2344	2584	2824	3064	6174	7174	8174
0.22	CSR13G224M*	20	A	0.3	2	2345	2585	2825	3065	6175	7175	8175
0.27	CSR13G274K*	10	A	0.3	2	2346	2586	2826	3066	6177	7177	8177
0.33	CSR13G334K*	10	A	0.3	2	2347	2587	2827	3067	6179	7179	8179
0.33	CSR13G334M*	20	A	0.3	2	2348	2588	2828	3068	6180	7180	8180
0.39	CSR13G394K*	10	A	0.3	2	2349	2589	2829	3069	6182	7182	8182
0.47	CSR13G474K*	10	A	0.3	2	2350	2590	2830	3070	6184	7184	8184
0.47	CSR13G474M*	20	A	0.3	2	2351	2591	2831	3071	6185	7185	8185
0.56	CSR13G564K*	10	A	0.3	2	2352	2592	2832	3072	6187	7187	8187
0.68	CSR13G684K*	10	A	0.3	2	2353	2593	2833	3073	6189	7189	8189
0.68	CSR13G684M*	20	A	0.3	2	2354	2594	2834	3074	6190	7190	8190
0.82	CSR13G824K*	10	A	0.3	2	2355	2595	2835	3075	6192	7192	8192
1.00	CSR13G105K*	10	A	0.4	2	2356	2596	2836	3076	6194	7194	8194

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.

Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

\* Failure rate level indicator  
(M, P, R, S)

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap Cap ( $\mu$ F)	Catalog Part Number	Cap Tolerance (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
<b>50 WVdc @ +85 °C — 33 WVdc @ +125 °C</b>												
1	CSR13G105M*	20	A	0.4	2	2357	2597	2837	3077	6195	7195	8195
1.2	CSR13G125K*	10	B	0.4	4	2358	2598	2838	3078	6197	7197	8197
1.5	CSR13G155K*	10	B	0.5	4	2359	2599	2839	3079	6199	7199	8199
1.5	CSR13G155M*	20	B	0.5	4	2360	2600	2840	3080	6200	7200	8200
1.8	CSR13G185K*	10	B	0.5	4	2361	2601	2841	3081	6202	7202	8202
2.2	CSR13G225K*	10	B	0.8	4	2362	2602	2842	3082	6204	7204	8204
2.2	CSR13G225M*	20	B	0.8	4	2363	2603	2843	3083	6205	7205	8205
2.7	CSR13G275K*	10	B	0.8	4	2364	2604	2844	3084	6207	7207	8207
3.3	CSR13G335K*	10	B	1.2	4	2365	2605	2845	3085	6209	7209	8209
3.3	CSR13G335M*	20	B	1.2	4	2366	2606	2846	3086	6210	7210	8210
3.9	CSR13G395K*	10	B	1.5	4	2367	2607	2847	3087	6212	7212	8212
4.7	CSR13G475K*	10	B	1.7	4	2368	2608	2848	3088	6214	7214	8214
4.7	CSR13G475M*	20	B	1.7	4	2369	2609	2849	3089	6215	7215	8215
5.6	CSR13G565K*	10	C	2.2	4	2370	2610	2850	3090	6217	7217	8217
6.8	CSR13G685K*	10	C	2.2	4	2371	2611	2851	3091	6219	7219	8219
6.8	CSR13G685M*	20	C	2.2	4	2372	2612	2852	3092	6220	7220	8220
8.2	CSR13G825K*	10	C	2.5	4	2373	2613	2853	3093	6222	7222	8222
10	CSR13G106K*	10	C	2.5	4	2374	2614	2854	3094	6224	7224	8224
10	CSR13G106M*	20	C	2.5	4	2375	2615	2855	3095	6225	7225	8225
12	CSR13G126K*	10	C	0.3	4	2376	2616	2856	3096	6227	7227	8227
15	CSR13G156K*	10	C	4.0	4	2377	2617	2857	3097	6229	7229	8229
15	CSR13G156M*	20	C	4.0	4	2378	2618	2858	3098	6230	7230	8230
18	CSR13G186K*	10	C	4.5	4	2379	2619	2859	3099	6232	7232	8232
22	CSR13G226K*	10	D	5.5	4	2380	2620	2860	3100	6234	7234	8234
22	CSR13G226M*	20	D	5.5	4	2381	2621	2861	3101	6235	7235	8235
<b>75 WVdc @ +85 °C — 50 WVdc @ +125 °C</b>												
0.10	CSR13H104K*	10	A	0.3	2	2382	2622	2862	3102	6237	7237	8237
0.10	CSR13H104M*	20	A	0.3	2	2383	2623	2863	3103	6238	7238	8238
0.12	CSR13H124K*	10	A	0.3	2	2384	2624	2864	3104	6240	7240	8240
0.15	CSR13H154K*	10	A	0.3	2	2385	2625	2865	3105	6242	7242	8242
0.15	CSR13H154M*	20	A	0.3	2	2386	2626	2866	3106	6243	7243	8243
0.18	CSR13H184K*	10	A	0.3	2	2387	2627	2867	3107	6245	7245	8245
0.22	CSR13H224K*	10	A	0.3	2	2388	2628	2868	3108	6247	7247	8247
0.22	CSR13H224M*	20	A	0.3	2	2389	2629	2869	3109	6248	7248	8248
0.27	CSR13H274K*	10	A	0.3	2	2390	2630	2870	3110	6250	7250	8250
0.33	CSR13H334K*	10	A	0.3	2	2391	2631	2871	3111	6252	7252	8252
0.33	CSR13H334M*	20	A	0.3	2	2392	2632	2872	3112	6253	7253	8253
0.39	CSR13H394K*	10	A	0.3	2	2393	2633	2873	3113	6255	7255	8255
0.47	CSR13H474K*	10	A	0.3	2	2394	2634	2874	3114	6257	7257	8257
0.47	CSR13H474M*	20	A	0.3	2	2395	2635	2875	3115	6258	7258	8258
0.68	CSR13H684M*	20	A	0.3	2	2398	2638	2878	3118	6263	7263	8263

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.

Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

\* Failure rate level indicator  
(M, P, R, S)

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap Cap ( $\mu$ F)	Catalog Part Number	Cap Tolerance (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
<b>75 WVdc @ +85 °C — 50 WVdc @ +125 °C</b>												
0.56	CSR13H564K*	10	A	0.3	2	2396	2636	2876	3116	6260	7260	8260
0.68	CSR13H684K*	10	A	0.3	2	2397	2637	2877	3117	6262	7262	8262
0.82	CSR13H824K*	10	B	0.3	2	2399	2639	2879	3119	6265	7265	8265
1.0	CSR13H105K*	10	B	0.3	2	2400	2640	2880	3120	6267	7267	8267
1.0	CSR13H105M*	20	B	0.3	2	2401	2641	2881	3121	6268	7268	8268
1.2	CSR13H125K*	10	B	0.3	4	2402	2642	2882	3122	6270	7270	8270
1.5	CSR13H155K*	10	B	0.6	4	2403	2643	2883	3123	6272	7272	8272
1.5	CSR13H155M*	20	B	0.6	4	2404	2644	2884	3124	6273	7273	8273
1.8	CSR13H185K*	10	B	0.7	4	2405	2645	2885	3125	6275	7275	8275
2.2	CSR13H225K*	10	B	0.8	4	2406	2646	2886	3126	6277	7277	8277
2.2	CSR13H225M*	20	B	0.8	4	2407	2647	2887	3127	6278	7278	8278
2.7	CSR13H275K*	10	B	1.0	4	2408	2648	2888	3128	6280	7280	8280
3.3	CSR13H335K*	10	B	1.2	4	2409	2649	2889	3129	6282	7282	8282
3.3	CSR13H335M*	20	B	1.2	4	2410	2650	2890	3130	6283	7283	8283
3.9	CSR13H395K*	10	B	1.5	4	2411	2651	2891	3131	6285	7285	8285
4.7	CSR13H475K*	10	C	3	4	2412	2652	2892	3132	6287	7287	8287
4.7	CSR13H475M*	20	C	3	4	2413	2653	2893	3133	6288	7288	8288
5.6	CSR13H565K*	10	C	3	4	2414	2654	2894	3134	6290	7290	8290
6.8	CSR13H685K*	10	C	5	4	2415	2655	2895	3135	6292	7292	8292
6.8	CSR13H685M*	20	C	5	4	2416	2656	2896	3136	6293	7293	8293
8.2	CSR13H825K*	10	C	5	4	2417	2657	2897	3137	6295	7295	8295
10	CSR13H106K*	10	C	5	4	2418	2658	2898	3138	6297	7297	8297
10	CSR13H106M*	20	C	5	4	2419	2659	2899	3139	6298	7298	8298
12	CSR13H126K*	10	D	5	4	2420	2660	2900	3140	6300	7300	8300
15	CSR13H156K*	10	D	7	4	2421	2661	2901	3141	6302	7302	8302
15	CSR13H156M*	20	D	7	4	2422	2662	2902	3142	6303	7303	8303
<b>100 WVdc @ +85 °C — 67 WVdc @ +125 °C</b>												
0.0047	CSR13J472K*	10	A	0.3	2	2423	2663	2903	3143	6305	7305	+8305
0.0047	CSR13J472M*	20	A	0.3	2	2424	2664	2904	3144	6306	7306	+8306
0.0056	CSR13J562K*	10	A	0.3	2	2425	2665	2905	3145	6308	7308	+8308
0.0068	CSR13J682K*	10	A	0.3	2	2426	2666	2906	3146	6310	7310	+8310
0.0068	CSR13J682M*	20	A	0.3	2	2427	2667	2907	3147	6311	7311	+8311
0.0082	CSR13J822K*	10	A	0.3	2	2428	2668	2908	3148	6313	7313	+8313
0.010	CSR13J103K*	10	A	0.3	2	2429	2669	2909	3149	6315	7315	+8315
0.010	CSR13J103M*	20	A	0.3	2	2430	2670	2910	3150	6316	7316	+8316
0.012	CSR13J123K*	10	A	0.3	2	2431	2671	2911	3151	6318	7318	+8318

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.

Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

+ C failure rate: Not QPL for +7390 thru +7401

+ D failure rate: Not QPL for +8305 thru +8401

\* Failure rate level indicator

(M, P, R, S)

# Type CSR13 (MIL-C-39003/01) Solid Tantalum Capacitors

## Ratings

Cap ( $\mu$ F)	Catalog Part Number	Cap Tolerance (%)	Case Code	Max DCL @ +25 °C ( $\mu$ A)	Max. DF @ +25 °C 120 Hz (%)	MIL-C-39003/1 (CSR 13) Dash Numbers						
						Exponential Failure Rate (% per 1000 hours)				Weibull Failure Rate (% per 1000 hours)		
						'M' Level (1.0)	'P' Level (.10)	'R' Level (.01)	'S' Level (.001)	'B' Level (.10)	'C' Level (.01)	'D' Level (.001)
100 WVdc @ +85 °C — 67 WVdc @ +125 °C												
0.015	CSR13J153K*	10	A	0.3	2	2432	2672	2912	3152	6320	7320	+8320
0.015	CSR13J153M*	20	A	0.3	2	2433	2673	2913	3153	6321	7321	+8321
0.018	CSR13J183K*	10	A	0.3	2	2434	2674	2914	3154	6323	7323	+8323
0.022	CSR13J223K*	10	A	0.3	2	2435	2675	2915	3155	6325	7325	+8325
0.022	CSR13J223M*	20	A	0.3	2	2436	2676	2916	3156	6326	7326	+8326
0.27	CSR13J274K*	10	A	0.3	2	2455	2695	2935	3175	6358	7358	+8358
0.33	CSR13J334K*	10	A	0.3	2	2456	2696	2936	3176	6360	7360	+8360
0.33	CSR13J334M*	20	A	0.3	2	2457	2697	2937	3177	6361	7361	+8361
0.39	CSR13J394K*	10	A	0.3	2	2458	2698	2938	3178	6363	7363	+8363
0.47	CSR13J474K*	10	A	0.3	2	2459	2699	2939	3179	6365	7365	+8365
0.47	CSR13J474M*	20	A	0.3	2	2460	2700	2940	3180	6366	7366	+8366
0.56	CSR13J564K*	10	A	0.3	2	2461	2701	2941	3181	6368	7368	+8368
0.68	CSR13J684K*	10	B	0.3	2	2462	2702	2942	3182	6370	7370	+8370
0.68	CSR13J684M*	20	B	0.3	2	2463	2703	2943	3183	6371	7371	+8371
0.82	CSR13J824K*	10	B	0.4	2	2464	2704	2944	3184	6373	7373	+8373
1.0	CSR13J105K*	10	B	0.5	2	2465	2705	2945	3185	6375	7375	+8375
1.0	CSR13J105M*	20	B	0.5	2	2466	2706	2946	3186	6376	7376	+8376
1.2	CSR13J125K*	10	B	0.5	3	2467	2707	2947	3187	6378	7378	+8378
1.5	CSR13J155K*	10	B	0.7	3	2468	2708	2948	3188	6380	7380	+8380
1.5	CSR13J155M*	20	B	0.7	3	2469	2709	2949	3189	6381	7381	+8381
1.8	CSR13J185K*	10	B	0.7	3	2470	2710	2950	3190	6383	7383	+8383
2.2	CSR13J225K*	10	B	0.9	3	2471	2711	2951	3191	6385	7385	+8385
2.2	CSR13J225M*	20	B	0.9	3	2472	2712	2952	3192	6386	7386	+8386
2.7	CSR13J275K*	10	B	1.1	3	2473	2713	2953	3193	6388	7388	+8388
3.3	CSR13J335K*	10	C	1.5	3	5157	5357	5557	5757	6390	+7390	+8390
3.3	CSR13J335M*	20	C	1.5	3	5158	5358	5558	5758	6391	+7391	+8391
3.9	CSR13J395K*	10	C	1.5	3	5160	5360	5560	5760	6393	+7393	+8393
4.7	CSR13J475K*	10	C	2.5	3	5162	5362	5562	5762	6395	+7395	+8395
4.7	CSR13J475M*	20	C	2.5	3	5163	5363	5563	5763	6396	+7396	+8396
5.6	CSR13J565K*	10	C	2.5	3	5165	5365	5565	5765	6398	+7398	+8398
6.8	CSR13J685K*	10	C	2.5	3	5167	5367	5567	5767	6400	+7400	+8400
6.8	CSR13J685M*	20	C	2.5	3	5168	5368	5568	5768	6401	+7401	+8401

**TO ORDER:** Indicate the prefix M39003/01 followed by the applicable MIL dash number.

Example: For M39003/01-2241 or CSR13B565KM; order CSR132241

+ C failure rate: Not QPL for +7390 thru +7401

+ D failure rate: Not QPL for +8305 thru +8401

\* Failure rate level indicator  
(M, P, R, S)