

Product Series	Product Name	Thickness ± 10µm	BS Cycles	Vf	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680
M-Series	MHF06	104	≥100	Cap µF/cm²	0.709	0.694	0.678	0.658	0.645	0.591	0.580	0.567	0.543	0.528	0.518	0.505	0.491	0.482	0.474	0.464	0.453	0.445	0.410	0.403	0.392	0.386	0.373	0.368
	MHF07	104	≥100		0.761	0.746	0.728	0.707	0.693	0.642	0.630	0.615	0.589	0.573	0.563	0.548	0.533	0.523	0.515	0.504	0.492	0.484	0.450	0.442	0.430	0.423	0.409	0.403
	MHF08	110	≥100		0.810	0.793	0.775	0.752	0.737	0.690	0.677	0.661	0.634	0.616	0.605	0.590	0.573	0.562	0.554	0.542	0.529	0.520	0.489	0.481	0.467	0.460	0.445	0.438
	MHF09	115	≥100		0.861	0.843	0.823	0.800	0.783	0.742	0.727	0.710	0.680	0.662	0.650	0.633	0.616	0.604	0.595	0.582	0.568	0.558	0.531	0.522	0.507	0.500	0.483	0.476
	MHF10	115	≥100		0.897	0.879	0.858	0.834	0.817	0.781	0.770	0.760	0.750	0.729	0.715	0.700	0.675	0.650	0.627	0.613	0.598	0.588	0.566	0.556	0.540	0.532	0.515	0.507
	MHF11	120	≥100		0.927	0.908	0.886	0.861	0.843	0.825	0.810	0.797	0.770	0.751	0.737	0.724	0.711	0.680	0.663	0.635	0.616	0.593	0.584	0.568	0.554	0.546	0.533	0.517
	MHF12	120	≥100		0.973	0.953	0.931	0.904	0.880	0.852	0.835	0.816	0.782	0.769	0.755	0.742	0.725	0.697	0.680	0.660	0.640	0.616	0.607	0.592	0.577	0.568	0.554	0.538
	MHF13	125	≥90		1.002	0.982	0.959	0.931	0.906	0.878	0.861	0.841	0.805	0.793	0.778	0.764	0.747	0.718	0.700	0.680	0.659	0.634	0.625	0.609	0.594	0.585	0.571	0.554
	MHF14	125	≥90		1.052	1.031	1.007	0.978	0.952	0.922	0.904	0.883	0.846	0.832	0.817	0.802	0.784	0.754	0.735	0.714	0.692	0.666	0.656	0.640	0.624	0.614	0.599	0.581
	MHF15	125	≥80		1.105	1.082	1.056	1.026	0.999	0.967	0.948	0.926	0.888	0.873	0.857	0.842	0.823	0.791	0.772	0.749	0.726	0.699	0.689	0.671	0.654	0.645		
	MHF16	130	≥80		1.160	1.136	1.108	1.077	1.048	1.015	0.995	0.972	0.932	0.916	0.899	0.884	0.864	0.830	0.810	0.786	0.762	0.733	0.723	0.704	0.686	0.677		
R-Series	MHF03R	90	≥120		0.449	0.440	0.430	0.417	0.409	0.375	0.368	0.359	0.344	0.335	0.328	0.330	0.321	0.315	0.310	0.303	0.296	0.291	0.276	0.271	0.264	0.260	0.251	0.248
	MHF07R	104	≥120		0.761	0.746	0.728	0.707	0.693	0.642	0.630	0.615	0.589	0.573	0.563	0.548	0.533	0.523	0.515	0.504	0.492	0.484	0.450	0.442	0.430	0.423	0.409	0.403
	MHF08R	110	≥120		0.810	0.793	0.775	0.752	0.737	0.690	0.677	0.661	0.634	0.616	0.605	0.590	0.573	0.562	0.554	0.542	0.529	0.520	0.489	0.481	0.467	0.460	0.445	0.438
	MHF09R	115	≥120		0.861	0.843	0.823	0.800	0.783	0.742	0.727	0.710	0.680	0.662	0.650	0.633	0.616	0.604	0.595	0.582	0.568	0.558	0.531	0.522	0.507	0.500	0.483	0.476
	MHF10R	120	≥120		0.897	0.879	0.858	0.834	0.817	0.781	0.770	0.760	0.750	0.729	0.715	0.700	0.675	0.650	0.627	0.613	0.598	0.588	0.566	0.556	0.540	0.532	0.515	0.507
	MHF11R	120	≥120		0.927	0.908	0.886	0.861	0.843	0.825	0.810	0.797	0.770	0.751	0.737	0.724	0.711	0.680	0.663	0.635	0.616	0.593	0.584	0.568	0.554	0.546	0.533	0.517
	MHF12R	125	≥120		0.973	0.953	0.931	0.904	0.885	0.866	0.851	0.837	0.809	0.788	0.774	0.760	0.747	0.714	0.697	0.667	0.647	0.623	0.613	0.596	0.582	0.574	0.560	0.543
	MHF13R	125	≥120		1.021	1.000	0.977	0.949	0.929	0.909	0.893	0.878	0.848	0.827	0.812	0.798	0.784	0.749	0.731	0.700	0.678	0.654	0.643	0.626	0.610	0.602		
	MHF14R	130	≥120		1.072	1.050	1.025	0.996	0.975	0.954	0.937	0.921	0.890	0.868	0.852	0.837	0.823	0.786	0.767	0.735	0.711	0.686	0.675	0.657	0.640	0.632		

## Remark :

- The data shown according to the inspection standard of EIAJ RC-2364A.
- The capacitance for reference only, actual value should be according to quotation
- Capacitance tolerance -3%~+10%
- Density of Residual Chloride : ≤ 1.0 mg/m²
- M-Series products : Mixed acid formed,  
R-Series products : Mixed acid formed with high strength etched foils

Product Series	Product Name	Thickness ± 10µm	BS Cycles	Vf	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680
N-Series	NHF03	90	≥100	Cap μF/cm²	0.436	0.427	0.417	0.405	0.397	0.364	0.357	0.349	0.334	0.325	0.319	0.321	0.312	0.306	0.301	0.294	0.287	0.283	0.268	0.263	0.256	0.252	0.244	0.240
	NHF06	104	≥100		0.682	0.668	0.652	0.633	0.620	0.569	0.558	0.545	0.522	0.507	0.498	0.486	0.472	0.463	0.456	0.446	0.435	0.428	0.395	0.387	0.377	0.371	0.359	0.353
	NHF07	104	≥100		0.725	0.710	0.693	0.674	0.660	0.612	0.600	0.586	0.561	0.546	0.536	0.522	0.508	0.498	0.491	0.480	0.468	0.461	0.429	0.421	0.409	0.403	0.390	0.384
	NHF08	110	≥100		0.771	0.756	0.738	0.717	0.702	0.658	0.645	0.630	0.603	0.587	0.576	0.562	0.546	0.535	0.527	0.516	0.503	0.495	0.466	0.458	0.445	0.438	0.424	0.418
	NHF09	115	≥100		0.812	0.795	0.777	0.754	0.739	0.700	0.686	0.670	0.642	0.624	0.613	0.597	0.581	0.569	0.561	0.549	0.535	0.527	0.501	0.492	0.478	0.471	0.456	0.449
	NHF10	120	≥100		0.855	0.837	0.817	0.794	0.778	0.744	0.730	0.713	0.683	0.670	0.660	0.645	0.625	0.606	0.597	0.584	0.570	0.560	0.539	0.529	0.514	0.507	0.490	0.483
	NHF11	120	≥100		0.900	0.881	0.860	0.836	0.819	0.792	0.776	0.758	0.727	0.706	0.694	0.680	0.660	0.650	0.635	0.621	0.606	0.585	0.565	0.560	0.553	0.545	0.527	0.519
	NHF12	120	≥100		0.930	0.905	0.880	0.860	0.835	0.810	0.795	0.775	0.752	0.740	0.725	0.710	0.685	0.670	0.655	0.637	0.621	0.600	0.580	0.574	0.564	0.556	0.537	0.530
	NHF13	125	≥90		0.945	0.925	0.903	0.878	0.860	0.831	0.815	0.796	0.763	0.742	0.728	0.714	0.693	0.683	0.667	0.652	0.636	0.614	0.593	0.588	0.581	0.572	0.553	0.545
	NHF14	130	≥90		0.977	0.950	0.924	0.903	0.877	0.851	0.835	0.814	0.790	0.777	0.761	0.746	0.719	0.704	0.688	0.668	0.652	0.630	0.609	0.603	0.593	0.584	0.564	0.556

Remark :

1. The data shown according to the inspection standard of EIAJ RC-2364A.
2. The capacitance for reference only, actual value should be according to quotation
3. Capacitance tolerance -3%~+10%
4. Density of Residual Chloride : ≤ 1.0 mg/m²
5. M-Series products : Mixed acid formed,  
R-Series products : Mixed acid formed with high strength etched foils