

Thermocouple Emf. Table

Type B Thermocouple

ANSI MC96.1-1982
JIS C 1602-1981 Unit: μV

T	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	T
0	0.000	0.833	1.578	2.244	2.841	3.378	3.855	4.272	4.629	4.926	5.177	5.377	5.526	5.626	5.679	5.688	5.654	5.588	5.491	5.365
10	-0.002	0.843	1.589	2.254	2.851	3.388	3.865	4.282	4.639	4.936	5.187	5.387	5.536	5.636	5.689	5.698	5.664	5.598	5.501	5.375
20	-0.004	0.853	1.600	2.264	2.861	3.398	3.875	4.292	4.651	4.948	5.201	5.401	5.550	5.650	5.703	5.712	5.678	5.612	5.515	5.389
30	-0.005	0.863	1.610	2.274	2.871	3.408	3.885	4.302	4.661	4.958	5.211	5.411	5.560	5.660	5.713	5.722	5.688	5.622	5.525	5.400
40	-0.006	0.873	1.620	2.284	2.881	3.418	3.895	4.312	4.671	4.968	5.221	5.421	5.570	5.670	5.723	5.732	5.698	5.632	5.535	5.410
50	-0.007	0.883	1.630	2.294	2.891	3.428	3.905	4.322	4.681	4.978	5.231	5.431	5.580	5.680	5.733	5.742	5.708	5.642	5.545	5.420
60	-0.008	0.893	1.640	2.304	2.901	3.438	3.915	4.332	4.691	4.988	5.241	5.441	5.590	5.690	5.743	5.752	5.718	5.652	5.555	5.430
70	-0.011	0.903	1.650	2.314	2.911	3.448	3.925	4.342	4.701	4.998	5.251	5.451	5.600	5.700	5.753	5.762	5.728	5.662	5.565	5.440
80	-0.017	0.913	1.660	2.324	2.921	3.458	3.935	4.352	4.711	5.008	5.261	5.461	5.610	5.710	5.763	5.772	5.738	5.672	5.575	5.450
90	-0.025	0.923	1.670	2.334	2.931	3.468	3.945	4.362	4.721	5.018	5.271	5.471	5.620	5.720	5.773	5.782	5.748	5.682	5.585	5.460
100	-0.033	0.933	1.680	2.344	2.941	3.478	3.955	4.372	4.731	5.028	5.281	5.481	5.630	5.730	5.783	5.792	5.758	5.692	5.595	5.470

Type S Thermocouple

ANSI MC96.1-1982
JIS C 1602-1981 Unit: μV

T	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	T
0	0.000	0.645	1.260	1.825	2.350	2.834	3.277	3.679	4.040	4.360	4.639	4.867	5.045	5.173	5.251	5.279	5.257	5.191	5.094	4.868
10	0.002	0.719	1.323	1.904	2.428	2.912	3.355	3.757	4.118	4.438	4.717	4.945	5.123	5.251	5.329	5.357	5.335	5.269	5.172	4.946
20	0.0013	0.795	1.413	1.995	2.492	2.976	3.419	3.821	4.182	4.502	4.781	5.009	5.187	5.315	5.393	5.421	5.399	5.333	5.236	5.010
30	0.173	0.872	1.498	2.089	2.569	3.053	3.496	3.898	4.259	4.579	4.858	5.086	5.264	5.392	5.470	5.500	5.478	5.412	5.315	5.089
40	0.233	0.950	1.580	2.192	2.650	3.134	3.577	3.979	4.340	4.660	4.939	5.167	5.345	5.473	5.551	5.581	5.559	5.493	5.396	5.170
50	0.299	1.029	1.673	2.296	2.735	3.219	3.662	4.064	4.425	4.745	5.024	5.252	5.430	5.558	5.636	5.666	5.644	5.578	5.481	5.255
60	0.365	1.109	1.762	2.399	2.814	3.298	3.741	4.143	4.504	4.824	5.103	5.331	5.509	5.637	5.715	5.745	5.723	5.657	5.560	5.334
70	0.432	1.189	1.854	2.501	2.893	3.377	3.820	4.222	4.583	4.903	5.182	5.410	5.588	5.716	5.794	5.824	5.802	5.736	5.639	5.413
80	0.502	1.273	1.943	2.609	2.972	3.456	3.900	4.302	4.663	4.983	5.262	5.490	5.668	5.796	5.874	5.904	5.882	5.816	5.719	5.493
90	0.573	1.358	2.032	2.714	3.051	3.535	3.979	4.381	4.742	5.062	5.341	5.569	5.747	5.875	5.953	5.983	5.961	5.895	5.798	5.572
100	0.645	1.443	2.123	2.823	3.134	3.618	4.062	4.464	4.825	5.145	5.424	5.652	5.830	5.958	6.036	6.066	6.044	5.978	5.881	5.655

Type R Thermocouple

ANSI MC96.1-1982
JIS C 1602-1981 Unit: μV

T	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	T
0	0.000	0.647	1.262	1.827	2.352	2.836	3.279	3.681	4.042	4.362	4.641	4.869	5.047	5.175	5.253	5.281	5.259	5.193	5.096	4.870
10	0.004	0.723	1.327	1.888	2.413	2.897	3.340	3.742	4.103	4.423	4.702	4.930	5.108	5.236	5.314	5.342	5.320	5.254	5.157	4.931
20	0.111	0.800	1.407	1.968	2.498	2.982	3.425	3.827	4.188	4.508	4.787	5.015	5.193	5.321	5.399	5.427	5.405	5.339	5.242	5.016
30	0.173	0.879	1.508	2.065	2.595	3.079	3.522	3.924	4.285	4.605	4.884	5.112	5.290	5.418	5.496	5.524	5.502	5.436	5.339	5.113
40	0.232	0.959	1.608	2.170	2.696	3.180	3.623	4.025	4.386	4.706	4.985	5.213	5.391	5.519	5.597	5.625	5.603	5.537	5.440	5.214
50	0.294	1.041	1.707	2.279	2.795	3.279	3.722	4.124	4.485	4.805	5.084	5.312	5.490	5.618	5.696	5.724	5.702	5.636	5.539	5.313
60	0.363	1.124	1.817	2.391	2.897	3.381	3.824	4.226	4.587	4.907	5.186	5.414	5.592	5.720	5.798	5.826	5.804	5.738	5.641	5.415
70	0.432	1.208	1.911	2.509	3.014	3.498	3.941	4.343	4.704	5.024	5.303	5.531	5.709	5.837	5.915	5.943	5.921	5.855	5.758	5.532
80	0.505	1.294	2.007	2.633	3.138	3.622	4.065	4.467	4.828	5.148	5.427	5.655	5.833	5.961	6.039	6.067	6.045	5.979	5.882	5.656
90	0.573	1.380	2.103	2.764	3.269	3.753	4.196	4.598	4.959	5.279	5.558	5.786	5.964	6.092	6.170	6.198	6.176	6.110	6.013	5.787
100	0.647	1.468	2.203	2.907	3.407	3.891	4.334	4.736	5.097	5.417	5.696	5.924	6.102	6.230	6.308	6.336	6.314	6.248	6.151	5.925

Type K Thermocouple

ANSI MC96.1-1982
JIS C 1602-1981 Unit: μV

T	-200	-100	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	T
-200	-3.253	-0.900	0.000	0.800	1.695	2.577	3.457	4.337	5.217	6.097	6.977	7.857	8.737	9.617	10.497	11.377	12.257	13.137	14.017	14.897
-180	-3.832	-0.980	0.0	0.887	1.808	2.703	3.583	4.463	5.343	6.223	7.103	7.983	8.863	9.743	10.623	11.503	12.383	13.263	14.143	15.023
-160	-4.138	-0.777	20	0.788	1.819	2.730	3.610	4.490	5.370	6.250	7.130	8.010	8.890	9.770	10.650	11.530	12.410	13.290	14.170	15.050
-140	-4.438	-0.576	30	0.703	1.857	2.788	3.668	4.548	5.428	6.308	7.188	8.068	8.948	9.828	10.708	11.588	12.468	13.348	14.228	15.108
-120	-4.699	-0.377	40	0.631	1.853	2.804	3.684	4.564	5.444	6.324	7.204	8.084	8.964	9.844	10.724	11.604	12.484	13.364	14.244	15.124
-100	-4.912	-0.180	50	0.573	1.827	2.837	3.717	4.597	5.477	6.357	7.237	8.117	8.997	9.877	10.757	11.637	12.517	13.397	14.277	15.157
-80	-5.118	-0.183	60	0.536	1.828	2.838	3.718	4.598	5.478	6.358	7.238	8.118	8.998	9.878	10.758	11.638	12.518	13.398	14.278	15.158
-70	-5.250	-0.286	70	0.500	1.830	2.840	3.720	4.600	5.480	6.360	7.240	8.120	8.999	9.879	10.759	11.639	12.519	13.399	14.279	15.159
-60	-5.350	-0.390	80	0.466	1.833	2.843	3.723	4.603	5.483	6.363	7.243	8.123	8.999	9.879	10.759	11.639	12.519	13.399	14.279	15.159
-50	-5.430	-0.540	90	0.431	1.837	2.847	3.727	4.607	5.487	6.367	7.247	8.127	8.999	9.879	10.759	11.639	12.519	13.399	14.279	15.159
-40	-5.490	-0.740	100	0.400	1.842	2.851	3.731	4.611	5.491	6.371	7.251	8.131	8.999	9.879	10.759	11.639	12.519	13.399	14.279	15.159