

Technical Information

Mechanical Specifications	K5C-30	K6L-40	K6L-50 MR	K8S-50	K10S-70	K10T-200	K10T-200 MR	K12L-50	K12S-100	K12T-100	K12H-100	K12H-100 TC	K12T-150	K12T-200	K12B-300	K15T-100	K15T-200	K15H-200	K15B-300	K18J-300	
Nominal Diameter (ins)	5	6	6	8	10	10	10	12	12	12	12	12	12	12	12	15	15	15	15	18	
Magnet Diameter (mm/ins)	90/3.5	100/4	100/4	120/4.7	120/4.7	140/5.5	140/5.5	100/4	120/4.7	140/5.5	150/6	150/6	140/5.5	140/5.5	150/6	140/5.5	140/5.5	150/6	150/6	190/7.5	
Magnet Weight (oz)	13	20	20	27	27	35	35	20	27	35	50	50	35	35	46	35	35	50	46	86	
Voice Coil Diameter (mm/ins)	25/1.0	32/1.25	32/1.25	38/1.5	38/1.5	63/2.5	63/2.5	38/1.5	44/1.75	44/1.75	44/1.75	44/1.75	50/2	64/2.5	75/3	44/1.75	64/2.5	64/2.5	75/3	75/3	
Former Material	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	Kapton	
Coil Winding Length (mm/ins)	7.5/0.29	10/0.39	7/0.27	9/0.35	9/0.35	12/0.47	9/0.35	10/0.39	10/0.39	10/0.39	12/0.47	11/0.43	10/0.39	10/0.39	11/0.43	10/0.39	10/0.39	12/0.47	11/0.43	16/0.63	
Magnet Gap Depth (mm/ins)	6/0.24	6/0.24	6/0.24	7/0.27	7/0.27	8/0.31	8/0.31	6/0.24	8/0.31	8/0.31	8/0.31	8/0.31	7/0.27	8/0.31	8/0.31	8/0.31	8/0.31	8/0.31	8/0.31	9.5/0.37	
Coil Wire Metal	Copper	Copper	Copper	Copper	Copper	Copper	Copper Clad Ali Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	Copper	
Coil Wire Section	Round	Round	Round	Round	Round	Round	Round	Round	Round	Rqund	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	
Unit Overall Depth (mm/ins)	67/2.64	74/2.91	74/2.91	85/3.35	100/3.94	105/4.13	105/4.13	105/4.13	105/4.13	125/4.92	130/5.12	130/5.12	125/4.92	125/4.92	120/4.72	155/6.10	155/6.10	160/6.30	160/6.30	370/14.57	
Unit Weight (kg/lb)	0.9/1.98	1.6/3.53	1.6/3.53	2.4/5.29	2.5/5.51	3.4/7.50	3.4/7.50	2.15/4.74	2.9/6.39	3.4/7.50	4.3/9.48	4.3/9.48	3.5/7.72	3.8/8.63	4.8/10.67	3.6/7.94	5.5/12.12	5.5/12.12	6/13.23	9.6/21.16	
Electroacoustic Specifications																					
Frequency Range(Hz)	100 - 15k	90 - 10k	500 - 5k	80 - 7k	60 - 7k	70 - 6k	500 - 5k	50 - 5k	50 - 6k	50 - 6k	50 - 6k	50 - 10k	50 - 5k	50 - 5k	45 - 4k	35 - 4k	30 - 4k	30 - 4k	40 - 4k	30 - 3k	
Sensitivity (dB, 1W @ 1m)	90	93	97	95	95	96	98	95	96	97	98	97	97	97	96	96	96	98	97	98	
Power Handling (Watt)	30	40	50	50	70	200	200	50	100	100	100	100	150	200	300	100	200	200	300	300	
Nominal Impedance (Ohm)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
Resonance, fs (Hz)	140.4	89.5	550	129	80.1	67.1	140	55.0	51.0	51.0	51.0	51.0	51.0	61.8	50	35.0	35.0	42.1	40	30.0	
Resistance, Re (Ohm)	6.21	5.74	5.44	6.19	6.09	5.80	8	6.22	5.47	5.56	5.46	5.47	6.91	5.65	5.82	6.79	5.79	5.50	5.78	5.76	
Piston Diameter, d (m/ins)	0.10/3.94	0.14/5.50	n/a	0.17/6.69	0.20/7.87	0.21/8.27	n/a	0.26/10.24	0.26/10.24	0.26/10.24	0.26/10.24	0.26/10.24	0.26/10.24	0.26/10.24	0.26/10.24	0.33/12.99	0.33/12.99	0.330/12.99	0.33/12.99	0.38/14.96	
Piston Area, Sd (sq.m/sq.ins)	0.0078/12.2	0.0153/23.8	n/a	0.0227/35.2	0.03142/48.6	0.0346/53.7	n/a	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0530/82.4	0.0855/132.5	0.0855/132.5	0.0855/132.5	0.0855/132.5	0.113/175.8	
Equivalent Volume Vas (litres/cu.ft)	2.43/0.086	11.48/0.403	n/a	10.96/0.387	36.18/1.277	33.19/1.17	n/a	106.10/3.745	102.54/3.62	106.50/3.76	103.73/3.66	100.16/3.54	106.50/3.76	71.66/2.53	74.24/2.62	364.74/12.87	323.64/11.42	204.46/7.21	212.0/7.48	471.49/16.6	
Total Dynamic Mass. Mmt (gm)*	4.572	9.175	n/a	11.03	15.143	28.586	n/a	31.284	37.595	36.280	37.226	38.460	36.162	36.641	48.32	58.209	65.649	71.790	69.900	107.876	
*Includes Air Load Mair (gm)	0.394	1.080	n/a	1.77	3.15	3.647	n/a	6.921	6.921	6.921	6.921	6.921	6.921	6.921	6.921	14.150	14.150	14.150	14.150	21.606	
Electrical Q, Qes	0.986	0.795	n/a	0.719	0.884	0.469	n/a	1.422	0.698	0.532	0.352	0.417	0.588	0.550	0.592	0.689	0.613	0.508	0.665	0.275	
Mechanical Q, Qms	2.549	4.362	n/a	3.124	5.378	8.394	n/a	12.077	9.726	10.170	6.660	7.994	5.964	7.887	4.461	5.800	7.304	6.051	4.863	5.641	
Total Q, Qts	0.711	0.673	n/a	0.584	0.759	0.445	n/a	1.273	0.651	0.506	0.334	0.397	0.535	0.514	0.523	0.616	0.565	0.469	0.585	0.262	
Bl Product, Bl (Tm)	5.0	6.1	n/a	8.77	7.2	12.2	n/a	6.9	9.7	11.0	13.6	12.7	11.7	12.1	12.7	11.2	11.7	14.3	12.7	20.6	
Compliance, Cms (mm/N)	0.281	0.345	n/a	0.138	0.261	0.197	n/a	0.268	0.259	0.269	0.262	0.253	0.269	0.181	0.1875	0.355	0.315	0.199	0.2065	0.261	
Mechanical Resistance, Rms (kg/s)	1.58	1.18	n/a	2.86	1.42	1.44	n/a	0.89	1.24	1.14	1.79	1.54	1.94	1.80	3.60	2.21	1.98	3.14	3.78	3.60	
Peak Excursion, Xmax (mm/ins)	1.5/0.059	0.5/0.020	n/a	1.5/0.059	1.5/0.059	1.5/0.059	n/a	1.5/0.059	2/0.078	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	1.5/0.059	3.25/0.128	
Flux Density, B (T)	1.12	1.0	1.0	1.3	1.3	1.2	1.16	0.95	1.1	1.2	1.35	1.35	1.1	1.16	0.96	1.2	1.16	1.2	0.96	1.4	
Coil Inductance @ 1 kHz, Le (mH)	0.3	0.32	0.32	0.14	0.14	0.55	0.4	0.14	0.7	0.7	0.7	0.7	0.9	0.8	0.81	0.7	0.8	0.55	0.81	1.05	
Highest Crossover Frequency (Hz)	12k	9k	900/6k	7k	6k	2k	500/5k	3k	5k	5k	5k	10k	5k	4k	5k	1.5k	1.5k	1.5k	1.5k	600	
# Kr	0.00233	0.002522	n/a	0.00504	0.004448	0.00778	n/a	0.003647	0.005143	0.005305	0.004863	0.005946	0.003097	0.00655	0.00472	0.007776	0.007313	0.00755	0.00521	0.0196	
Xr	0.739	0.738146	n/a	0.708394	0.722962	0.699	n/a	0.738654	0.720581	0.714911	0.727349	0.70995	0.784035	0.707	0.752	0.693128	0.707149	0.704	0.744	0.655	
Ki	0.00987	0.009913	n/a	0.014031	0.013429	0.0343	n/a	0.024249	0.02724	0.02597	0.02221	0.017623	0.025283	0.0321	0.0248	0.029084	0.035843	0.0322	0.0287	0.068	
Xi	0.656	0.656111	n/a	0.652119	0.658639	0.593	n/a	0.602942	0.600058	0.59886	0.62047	0.640619	0.633145	0.594	0.644	0.600415	0.592952	0.603	0.628	0.566	
Suggested Alignment 1 Vb (Lts)	n/a	10	n/a	10	30	30	n/a	40	60	70	60	60	70	50	50	110	110	110	120	150	
Fb (Hz)	n/a	80	n/a	110	75	55	n/a	50	50	50	50	50	50	55	50	40	40	40	40	40	
Vd (mm)	n/a	50	n/a	65	76	76	n/a	76	76	100	100	100	100	100	76	100	100	100	100	152	
Vl (mm)	n/a	55	n/a	36	26	95	n/a	81	36	52	85	85	52	80	54	61	61	61	50	117	

HF Parameters - J R Wright, 'An Empirical Model for Loudspeaker Motor Impedance,' J Audio Eng. Soc. Vol 38 No 10, Oct 1990
n/a - not applicable MR - Midrange TC - Twin Cone