



2020 MB SUBWOOFER SPECS

	Unit	MB824-2	MB824-4	MB1010-2	MB1024-4	MB1224-2	MB1224-4	MB1524-2	MB1524-4
THIELSE SMALL PARAMETERS									
Resonant Frequency (fs)	Hz	48	48	36	36	33	33	25	25
Mechanical Q (Qms)		4.94	5.41	4.33	4.31	5.3	5.22	6.53	6.88
Electrical Q (Qes)		0.79	0.7	0.78	0.67	0.83	0.69	0.65	0.58
Total Q (Qts)		0.68	0.62	0.66	0.58	0.72	0.61	0.59	0.54
Sensitivity	dB	83.5	84.1	84.6	85.3	86.8	87.5	88.4	88.9
Xmax Linear	in.	0.27	0.27	0.45	0.45	0.45	0.45	0.4	0.4
Xmax Mechanical	in.	0.75	0.75	1	1	1	1	1	1
Displacement	cf.	0.04	0.04	0.12	0.12	0.16	0.16	0.29	0.29
Air volume of suspension (Vas)	cf.	0.366	0.353	1.04	1.04	2.39	2.39	6.51	6.51
Moving Mass (Mms)	g	76.43	76.43	127.79	127.79	151.75	151.75	255.71	255.71
Suspension Compliance (Cms)	mmN	0.144	0.138	0.146	0.146	0.147	0.149	0.156	0.156
Effective piston area (Sd)	SqCm	227	227	380.13	380.13	572.56	572.56	917	917
Motor Strength (Bl)	TM	7.65	11.66	8.77	13.09	8.66	13	11.3	16.66
VOICE COIL & MAGNET									
DCR	ohms	2	4	2	4	1.94	3.7	2	4
Voice coil diameter	in.	1.5	1.5	2	2	2	2	2	2
RMS Power	Watts	300	300	500	500	500	500	500	500
Peak Power	Watts	600	600	1000	1000	1000	1000	1000	1000
Magnet weight	oz	33	33	60	60	60	60	60	60
Magnet diameter	in.	4.72	4.72	5.71	5.71	5.71	5.71	5.71	5.71
PHYSICAL DIMENSIONS									
Mounting depth	in.	3.74	3.74	5.14	5.14	5.43	5.43	6.83	6.83
Cutout Diameter	in.	7.13	7.13	9.17	9.17	11.06	11.06	13.98	13.98
Frame Outside Diameter	in.	8.31	8.31	10.16	10.16	12.24	12.24	15.26	15.26
ENCLOSURE RECOMMENDATIONS									
Single sub sealed	cf.	0.6	0.6	1	1	1.25	1.25	3	3
Dual subs Sealed	cf.	1.2	1.2	2	2	2.5	2.5	6	6
Single sub vented	cf.	1.0 GROSS	1.0 GROSS	1.5 GROSS	1.5 GROSS	2.75 GROSS	2.75 GROSS	4.6 GROSS	4.6 GROSS
Port dimensions		9" x 1" x 12.5"L	9" x 1" x 12.5"L	10.5"x1.25"x17.75"L	10.5"x1.25"x17.75"L	12.5"x2"x20.75"L	12.5"x2"x20.75"L	15.5"x3"x29"L	15.5"x3"x29"L
Tuning frequency	Hz	40	40	38	38	35	35	32	32
Dual sub vented	cf.	2.0 GROSS	2.0 GROSS	2.9 GROSS	2.9 GROSS	5.5 GROSS	5.5 GROSS	8.5 GROSS	8.5 GROSS
Port dimensions		9" x 2" x 11.5"L	9" x 2" x 11.5"L	10.5"x2.5"x15.75"L	10.5"x2.5"x15.75"L	12.5"x4"x19"L	12.5"x4"x19"L	15.5"x4.5"x17.5"L	15.5"x4.5"x17.5"L
Tuning frequency	Hz	40	40	38	38	35	35	32	32