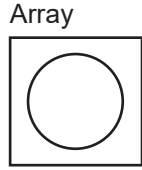


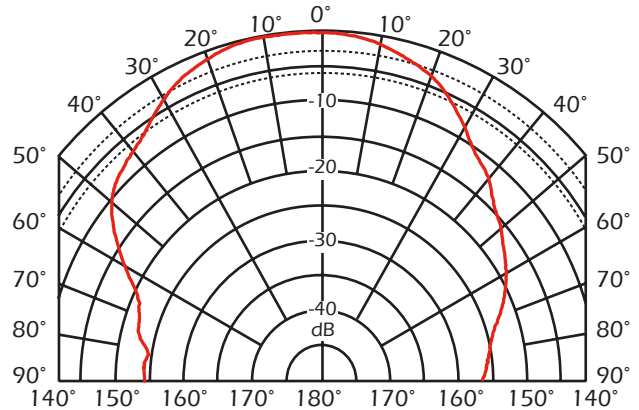
77/200 kHz-A (77kHz)

Power Rating: 300 W rms @ 1% duty cycle
 27mm (1.07") PZT
 Active Area: 5.8 cm² (0.90 in²)
 Radiating Surface: Urethane/Plastic



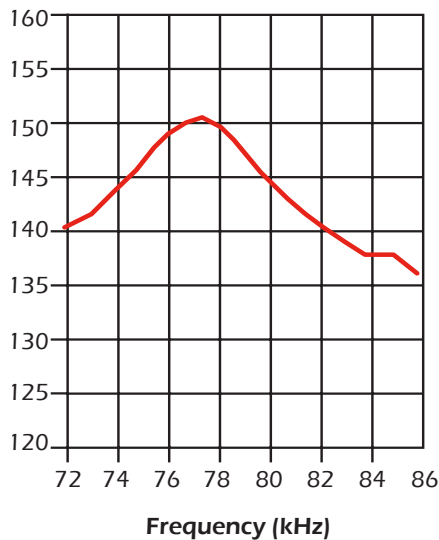
Beamwidth:
 -3 dB: 46°
 -6 dB: 61°
 -10 dB: 84°

Transmit Radiation Pattern

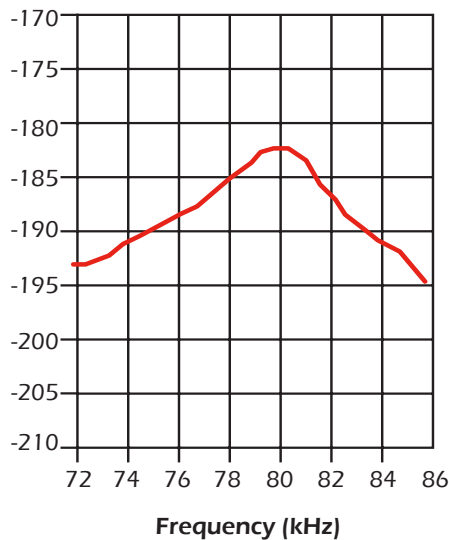


Directivity Index: 11.8
 Frequency Tolerance: +/-2kHz
 Peak TVR⁽¹⁾, nominal: 150.5 dB
 Peak TVR⁽¹⁾, minimum: 148.5 dB
 Q (transmit): 22
 Peak Source Level⁽⁴⁾: 203 dB
 Peak RVR⁽²⁾, nominal: -182.1 dB
 Peak Figure of Merit⁽³⁾: -35.3 dB

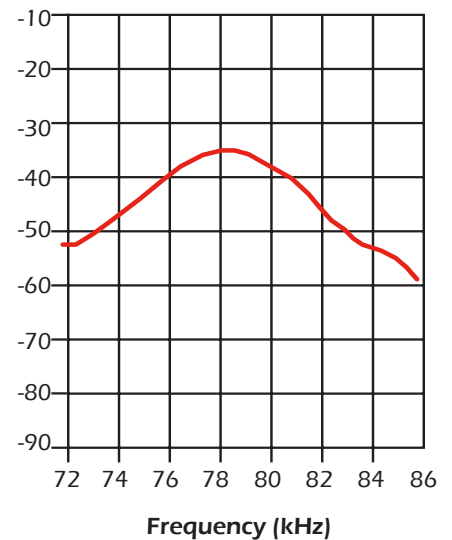
TVR
dB⁽¹⁾



RVR
dB⁽²⁾



FOM
dB⁽³⁾



Notes:

- (1) dB re 1 µPa per volt at 1 meter
- (2) dB re 1 volt per µPa
- (3) Sum of transmitting voltage response and receiving voltage response
- (4) Nominal peak TVR, rated power, and no cavitation

Technical Data Catalog

77/200 kHz-A (77kHz)

27mm (1.07") PZT

Cable Type: 22-1288-01
Cable Length: 10.3m (34')

Note:
Impedance data includes cable

Impedance Data		
	<i>Balanced</i>	<i>Unbalanced</i>
Parallel: Rp.	620 Ω: -20%, +40%	620 Ω: -20%, +40%
Parallel: Cp. (nominal)	930 pF	1,980 pF
Series [R - jX]: (nominal)	570-j160 Ω	460-j270 Ω
1 kHz capacitance: (nominal)	1,070 pF	2,130 pF

Balanced Impedance Table

Test Frequency (kHz)	Impedance Magnitude (Ω)	Phase Angle (°)	Series Resistance (Ω)	Series Reactance (Ω)	Parallel Conductance (mS)	Parallel Susceptance (mS)	Parallel Resistance (Ω)	Parallel Capacitance (pF)
72.00	1137.02	-81.16	174.71	-1123.52	0.14	0.87	7399.57	1921.02
72.50	1082.90	-79.96	188.84	-1066.31	0.16	0.91	6209.81	1996.13
73.00	1027.40	-78.40	206.56	-1006.42	0.20	0.95	5110.24	2078.73
73.50	969.46	-76.49	226.45	-942.64	0.24	1.00	4150.40	2171.81
74.00	909.26	-74.18	247.93	-874.81	0.30	1.06	3334.67	2275.73
74.50	844.67	-71.08	273.94	-799.02	0.38	1.12	2604.52	2392.45
75.00	782.11	-66.98	305.83	-719.83	0.50	1.18	2000.11	2497.23
75.50	716.65	-61.55	341.39	-630.11	0.66	1.23	1504.39	2586.29
76.00	654.88	-54.17	383.40	-530.92	0.89	1.24	1118.62	2592.45
76.50	606.12	-44.24	434.21	-422.90	1.18	1.15	846.09	2394.85
77.00	579.26	-31.14	495.79	-299.56	1.48	0.89	676.79	1845.30
77.50	595.62	-15.68	573.46	-160.96	1.62	0.45	618.64	931.76
78.00	669.43	-0.44	669.41	-5.13	1.49	0.01	669.45	23.35
78.50	815.47	12.48	796.20	176.22	1.20	-0.27	835.20	-537.28
79.00	1039.20	21.66	965.82	383.56	0.89	-0.36	1118.15	-715.54
79.50	1336.89	27.59	1184.81	619.27	0.66	-0.35	1508.49	-693.65
80.00	1750.40	30.77	1504.07	895.36	0.49	-0.29	2037.07	-581.37
80.50	2281.83	31.40	1947.61	1188.93	0.37	-0.23	2673.40	-451.45
81.00	3014.04	29.54	2622.18	1486.14	0.29	-0.16	3464.46	-321.44
81.50	3990.75	24.58	3629.16	1659.90	0.23	-0.10	4388.37	-203.53
82.00	5239.92	15.87	5040.11	1433.19	0.18	-0.05	5447.65	-101.31
82.50	6706.45	2.49	6700.10	291.82	0.15	-0.01	6712.81	-12.52
83.00	7761.57	-15.50	7479.34	-2073.99	0.12	0.03	8054.45	66.02
83.50	7984.22	-33.90	6627.19	-4452.88	0.10	0.07	9619.13	133.14
84.00	7408.21	-49.28	4833.06	-5614.55	0.09	0.10	11355.46	193.83
84.50	6641.52	-59.98	3323.25	-5750.29	0.08	0.13	13273.09	245.54
85.00	5931.03	-67.44	2275.11	-5477.32	0.06	0.16	15461.73	291.55
85.50	5324.70	-72.56	1595.60	-5080.01	0.06	0.18	17769.12	333.52
86.00	4851.86	-76.29	1150.32	-4713.52	0.05	0.20	20464.29	370.55