

17-278-203 rev. 02

170 kHz – A

Power rating: 500 W_{rms} @ 2% duty cycle
 51 mm (2.0") PZT
 Active Area: 20cm²
 Layered Plastic Urethane Window

Beamwidth:
 -3dB: 11°
 -6dB: 15°
 -10dB: 19°

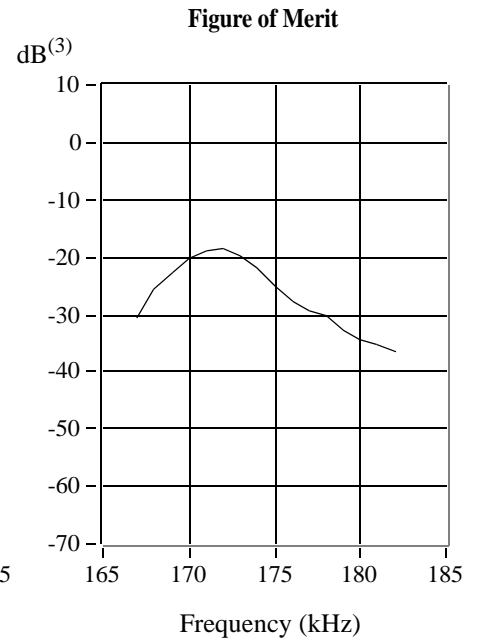
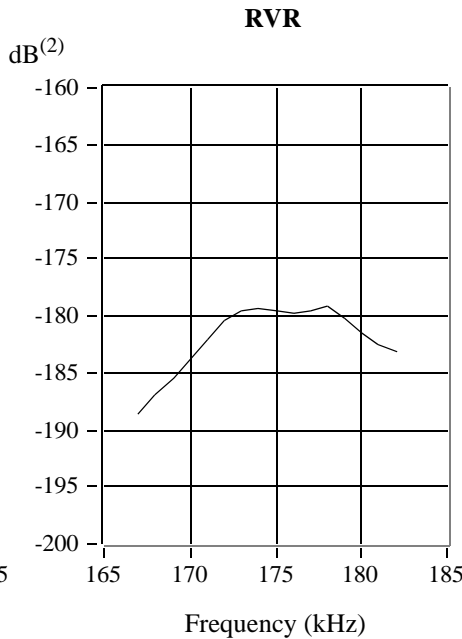
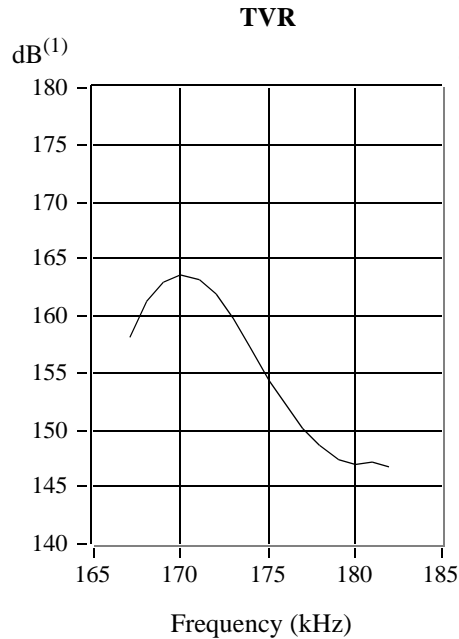
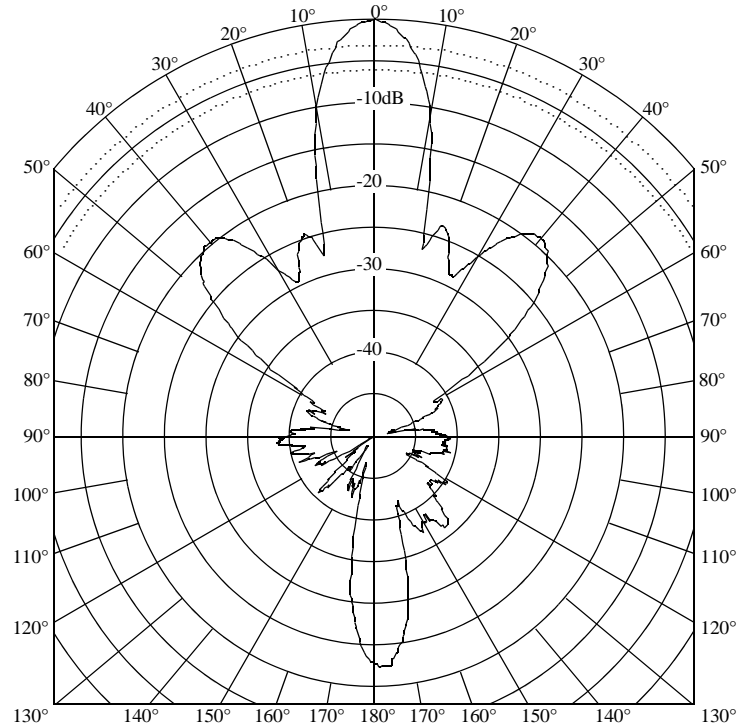
Directivity Index: 25.4
 Frequency Tolerance: ±4kHz
 Peak TVR⁽¹⁾, nominal: 163 dB
 Peak TVR⁽¹⁾, minimum: 161 dB
 Q (transmit): 35
 Peak Source Level⁽⁴⁾: 215dB
 Peak RVR⁽²⁾, nominal: -180dB
 Peak Figure of Merit⁽³⁾: -19dB

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

Acoustic Data: td file 1:Stored Data:170A:Urethane/ABS:990119-01:Test#2:02Sens
 Pattern Data: td file 1:Stored Data:170A:Urethane/ABS:990119-01:Test#1:06Direct

Transmit Radiation Pattern



Technical Data Catalog

17-278-203 rev. 02

170 kHz – A

51 mm (2.0") PZT

Cable Type: Test Cable

Cable Length: 3.0m (10.0')

Impedance Data	
<i>Balanced</i>	
Parallel: Rp.	320 ohms-20%, +40%
Parallel: Cp. (nominal)	580pF
Series [R – jX] (nominal)	310 – j60 ohms
1 kHz Capacitance	n/a

Balanced Impedance Table

Test Frequency (kHz)	Impedance Magnitude (ohms)	Phase Angle (°)	Series Resistance (ohms)	Series Reactance (ohms)	Parallel Conductance (mS)	Parallel Susceptance (mS)	Parallel Resistance (ohms)	Parallel Capacitance (pF)
165.00	376.35	-49.71	243.38	-287.06	1.7183	2.0267	581.96	1954.90
166.00	319.46	-32.68	268.89	-172.49	2.6348	1.6901	379.54	1620.42
167.00	312.37	-10.89	306.74	-59.03	3.1437	0.6050	318.10	576.53
168.00	361.83	9.90	356.44	62.20	2.7226	-0.4751	367.29	-450.06
169.00	466.84	25.81	420.28	203.24	1.9284	-0.9325	518.56	-878.20
170.00	648.40	36.32	522.40	384.08	1.2426	-0.9136	804.79	-855.28
171.00	912.47	40.35	695.36	590.83	0.8352	-0.7096	1197.37	-660.46
172.00	1267.12	39.73	974.56	809.83	0.6070	-0.5044	1647.51	-466.71
173.00	1730.35	33.92	1435.86	965.62	0.4796	-0.3225	2085.24	-296.70
174.00	2187.20	26.80	1952.31	986.07	0.4081	-0.2061	2450.35	-188.54
175.00	2878.43	17.30	2748.19	856.04	0.3317	-0.1033	3014.84	-93.96
176.00	3570.52	-0.05	3570.52	-2.82	0.2801	0.0002	3570.52	0.20
177.00	3707.77	-20.27	3478.25	-1284.26	0.2530	0.0934	3952.43	84.00
178.00	3339.56	-34.36	2756.70	-1885.00	0.2472	0.1690	4045.65	151.12
179.00	2962.32	-40.48	2253.19	-1923.14	0.2568	0.2192	3894.63	194.86
180.00	2848.30	-41.70	2126.67	-1894.75	0.2621	0.2336	3814.79	206.50