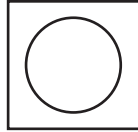


235 kHz-J1q

Power Rating: 250 W rms @ 1% duty cycle
 33 mm (1.30") PZT
 Active Area: 8.6 cm²
 Radiating Surface: HPC/Urethane

Array

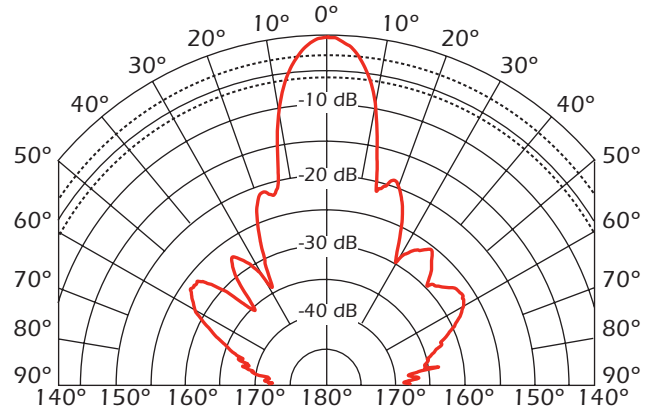


Beamwidth:

-3 dB: 11°
 -6 dB: 16°
 -10 dB: 20°

Directivity Index: 24.4 dB
 Frequency Tolerance: ±8 kHz
 Peak TVR⁽¹⁾, nominal: 163 dB
 Peak TVR⁽¹⁾, minimum: 161 dB
 Q (transmit): 4.0
 Peak Source Level⁽⁴⁾: 214 dB
 Peak RVR⁽²⁾, nominal: -192 dB
 Peak Figure of Merit⁽³⁾: -29 dB

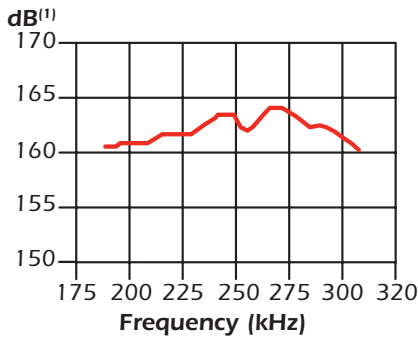
Transmit Radiation Pattern



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

TVR



RVR

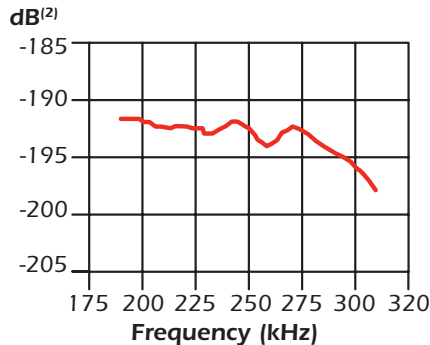
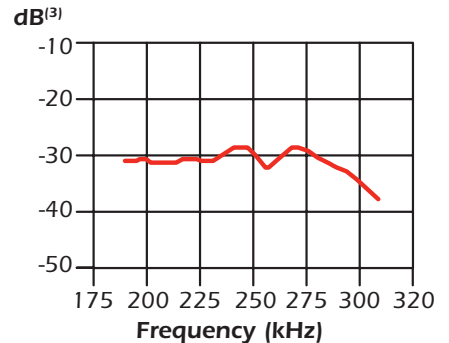


Figure of Merit



Technical Data Catalog

235 kHz-J1q

33 mm (1.30") PZT

Cable Type: C332

Cable Length: 10 m (33')

Note:

Impedance data includes cable

Impedance Data		
	Balanced	Unbalanced
Parallel: Rp.	865 Ω: -20%, +40%	850 Ω: -20%, +40%
Parallel: Cp. (nominal)	2000 pF	3150 pF
Series [R - jX]: (nominal)	115 - j295 Ω	50 - j200 Ω
1 kHz capacitance: (nominal)	2550 pF	3750 pF

Unbalanced 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)
190.00	233.12	-73.14	67.61	-223.09	1.24	4.11	803.74	3438.87
194.00	235.99	-72.82	69.71	-225.45	1.25	4.05	798.89	3321.30
198.00	237.67	-73.38	67.98	-227.74	1.20	4.03	830.95	3240.79
202.00	237.89	-74.27	64.51	-228.98	1.14	4.05	877.29	3187.94
206.00	234.64	-75.33	59.43	-226.99	1.08	4.12	926.42	3185.36
210.00	228.69	-75.79	56.14	-221.69	1.07	4.24	931.49	3212.61
214.00	223.87	-75.38	56.49	-216.62	1.13	4.32	887.21	3214.66
218.00	222.03	-74.91	57.80	-214.37	1.17	4.35	852.84	3174.77
222.00	221.00	-74.87	57.67	-213.34	1.18	4.37	846.86	3131.58
226.00	220.03	-75.45	55.29	-212.97	1.14	4.40	875.60	3097.86
230.00	215.78	-76.24	51.32	-209.59	1.10	4.50	907.38	3114.83
234.00	209.52	-76.06	50.47	-203.35	1.15	4.63	869.82	3150.69
235.00	208.28	-75.82	51.03	-201.94	1.18	4.65	850.19	3152.54
236.00	207.04	-75.53	51.74	-200.47	1.21	4.68	828.53	3153.98
240.00	204.66	-74.38	55.10	-197.10	1.32	4.71	760.18	3120.67
244.00	205.90	-73.32	59.11	-197.23	1.39	4.65	717.23	3034.54
248.00	209.49	-73.11	60.86	-200.45	1.39	4.57	721.09	2931.36
252.00	212.61	-74.33	57.44	-204.71	1.27	4.53	786.99	2860.06
256.00	209.20	-76.30	49.54	-203.25	1.13	4.64	883.52	2887.26
260.00	200.53	-76.37	47.24	-194.88	1.17	4.85	851.14	2966.71
264.00	196.69	-74.81	51.54	-189.82	1.33	4.91	750.57	2957.89
268.00	198.71	-73.11	57.72	-190.15	1.46	4.82	684.11	2859.69
272.00	205.23	-72.81	60.67	-196.06	1.44	4.65	694.29	2723.62
276.00	209.92	-74.33	56.71	-202.11	1.29	4.59	777.02	2644.86
280.00	210.41	-76.03	50.78	-204.19	1.15	4.61	871.82	2621.55
284.00	208.85	-77.48	45.26	-203.88	1.04	4.67	963.71	2619.56
288.00	205.88	-78.55	40.86	-201.78	0.96	4.76	1037.44	2630.85
292.00	203.71	-79.27	37.91	-200.15	0.91	4.82	1094.56	2628.85
296.00	202.92	-80.01	35.21	-199.85	0.86	4.85	1169.38	2609.49
300.00	201.73	-81.30	30.51	-199.41	0.75	4.90	1333.82	2599.57
304.00	198.70	-82.68	25.31	-197.08	0.64	4.99	1559.75	2613.35
308.00	194.60	-83.77	21.11	-193.45	0.56	5.11	1794.36	2639.69



Sensing Technology

235kHz-J1q -Rev 05 10/06/15

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