

## 50/200 kHz – A (50 kHz)

Power rating: 600 W<sub>rms</sub> @ 2% duty cycle  
 44mm (1.75") PZT  
 Active Area: 15.5cm<sup>2</sup>  
 Layered Plastic Urethane Window

**Beamwidth:**

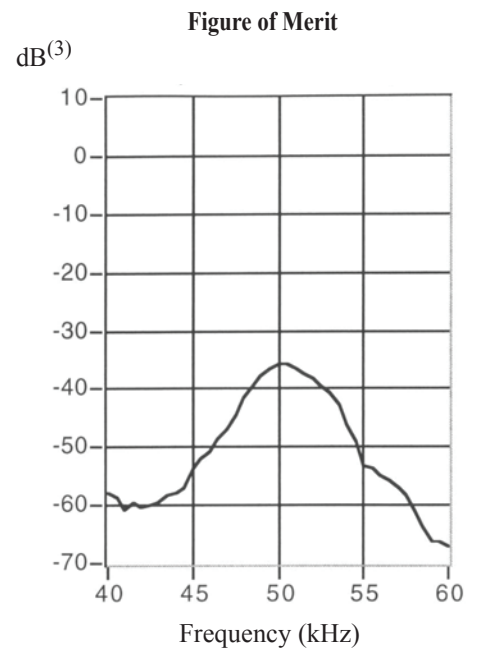
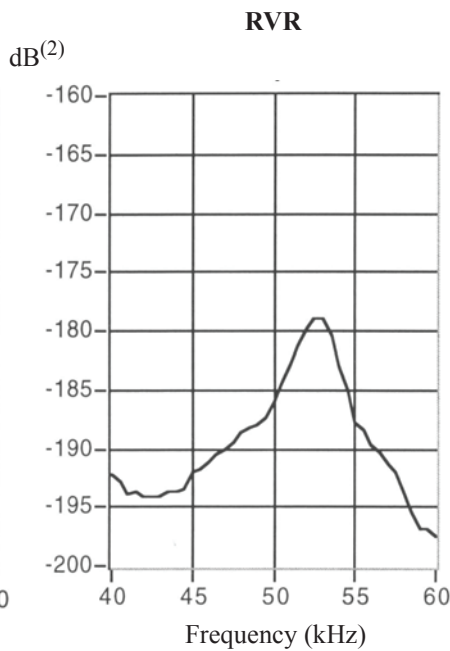
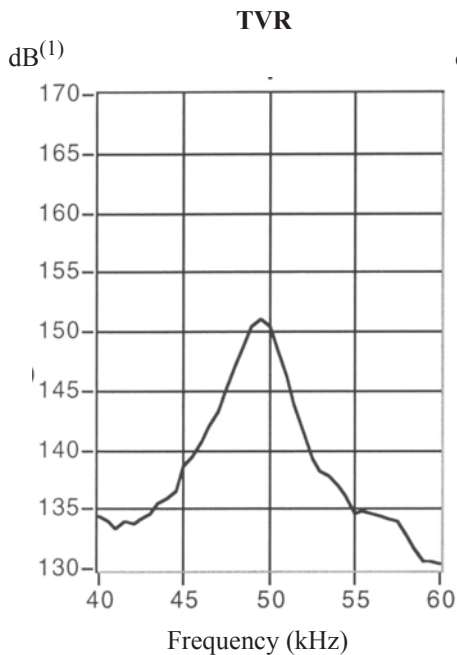
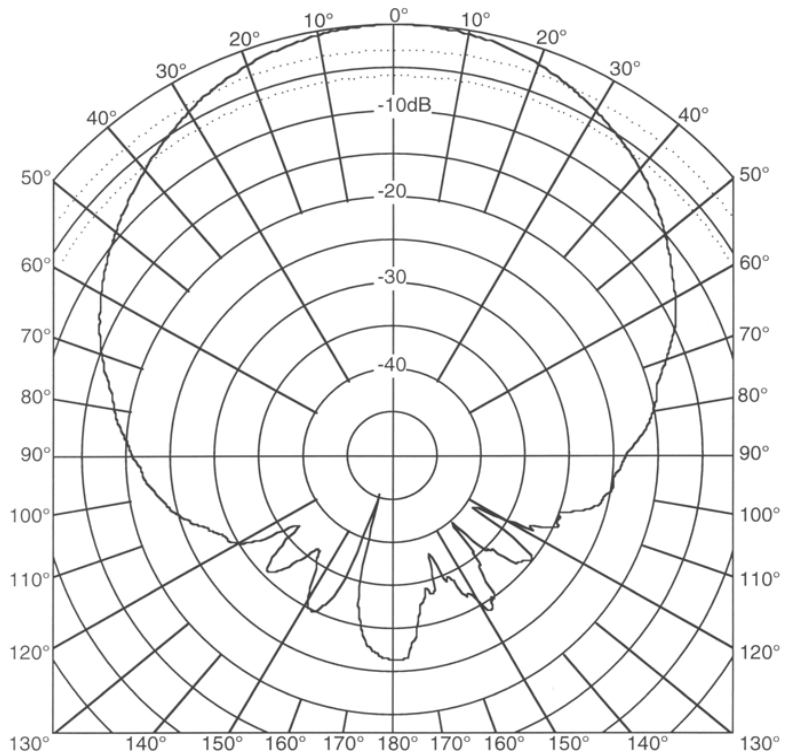
-3 dB: 45°  
 -6 dB: 69°  
 -10 dB: 94°

Directivity Index: 13.6  
 Frequency Tolerance: ±2 kHz  
 Peak TVR<sup>(1)</sup>, nominal: 151 dB  
 Peak TVR<sup>(1)</sup>, minimum: 149 dB  
 Q (transmit): 21  
 Peak Source Level<sup>(4)</sup>: 205 dB  
 Peak RVR<sup>(2)</sup>, nominal: -179 dB  
 Peak Figure of Merit<sup>(3)</sup>: -35 dB

**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

**Transmit Radiation Pattern**



# Technical Data Catalog

## 50/200 kHz – A (50 kHz)

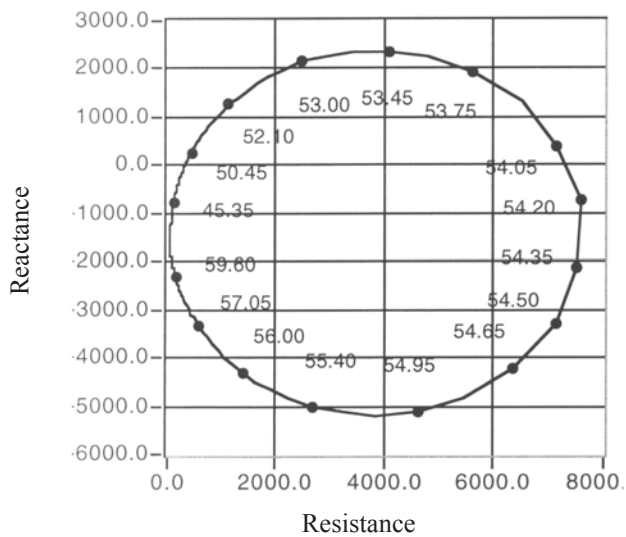
44mm (1.75")

Cable Type: C2

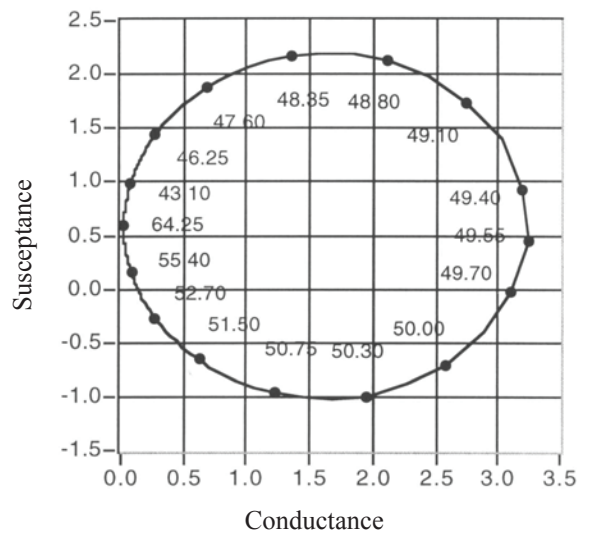
Cable Length: 7.6m (25.0')

| Impedance Data            |                   |                   |
|---------------------------|-------------------|-------------------|
|                           | Balanced          | Unbalanced        |
| Parallel: Rp.             | 300 ohms-20%,+40% | 300 ohms-20%,+40% |
| Parallel: Cp. (nominal)   | 2000pF            | 3000pF            |
| Series [R – jX] (nominal) | 310 – j25 ohms    | 295 – j41 ohms    |
| 1 kHz Capacitance         | 2430pF±20%        | 3470 pF±20%       |

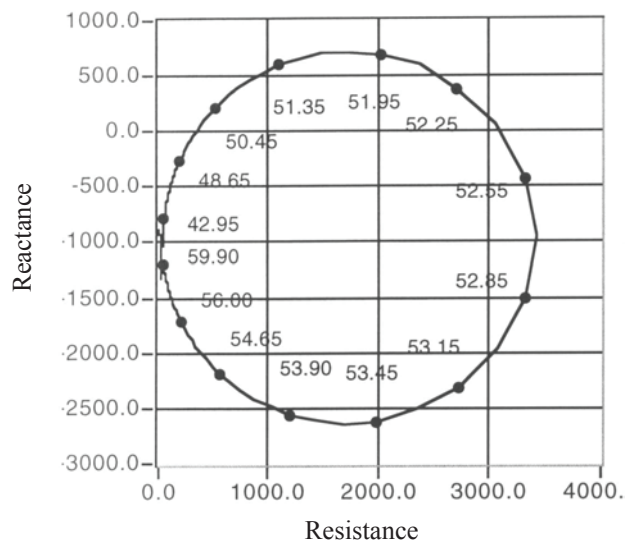
**Unbalanced Impedance**



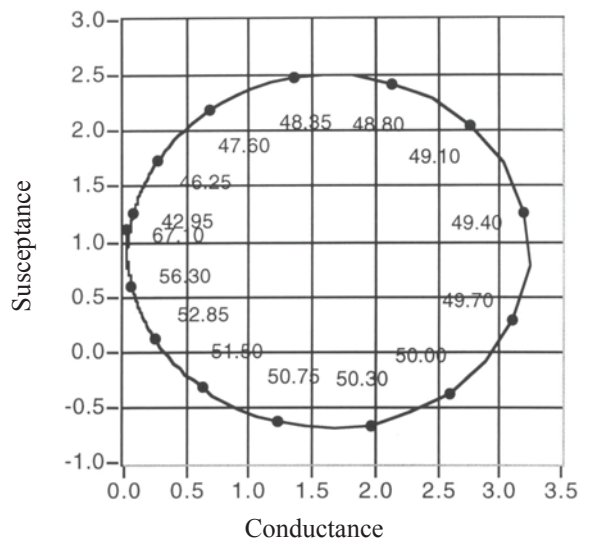
**Unbalanced Admittance**



**Balanced Impedance**



**Balanced Admittance**



### 50/200 kHz – A (200 kHz)

Power rating: 600 W<sub>rms</sub> @ 2% duty cycle  
 44mm (1.75") PZT  
 Active Area: 15.5cm<sup>2</sup>  
 Layered Plastic Urethane Window

**Beamwidth:**

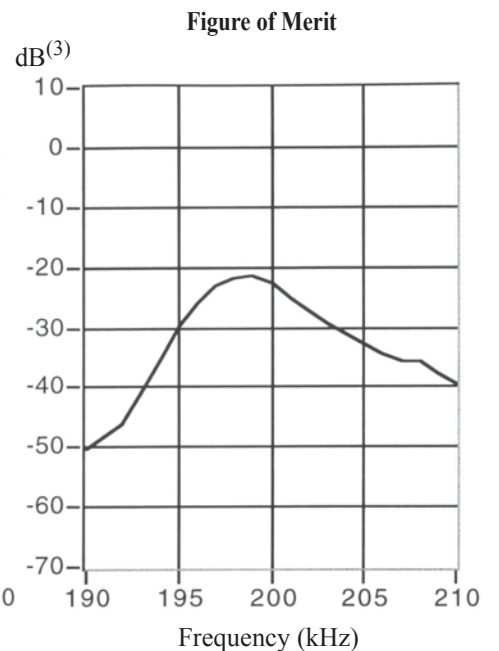
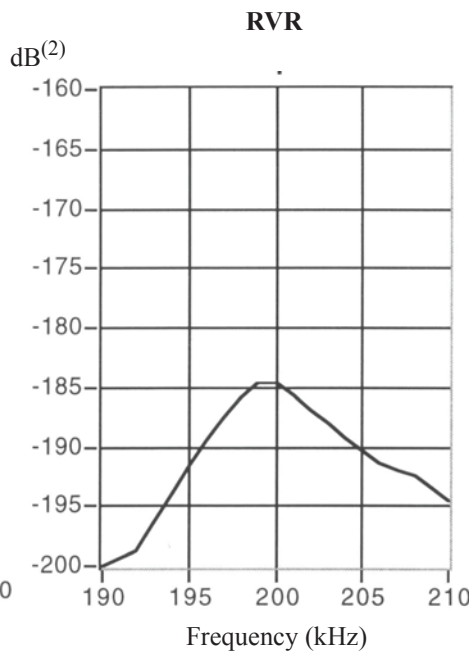
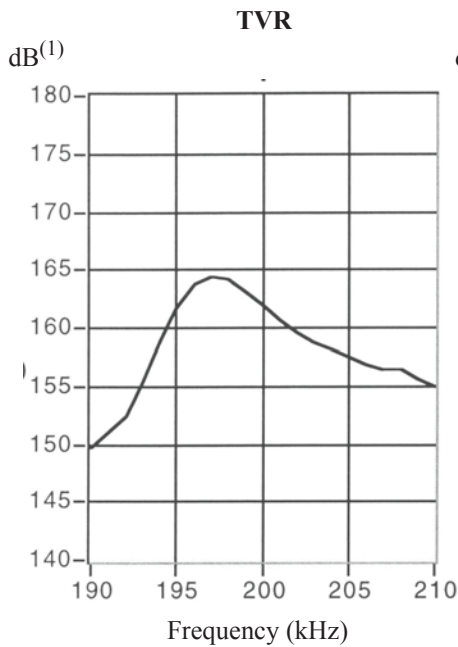
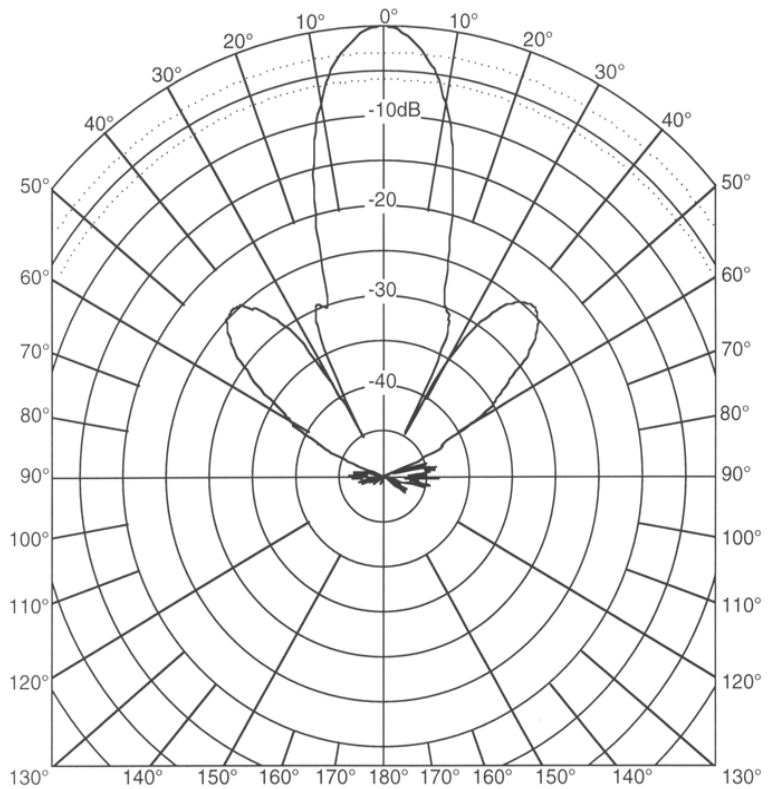
-3dB: 11°  
 -6dB: 16°  
 -10dB: 21°

Directivity Index: 25.6  
 Frequency Tolerance: ±4kHz  
 Peak TVR<sup>(1)</sup>, nominal: 164dB  
 Peak TVR<sup>(1)</sup>, minimum: 162dB  
 Q (transmit): 36  
 Peak Source Level<sup>(4)</sup>: 217dB  
 Peak RVR<sup>(2)</sup>, nominal: -185dB  
 Peak Figure of Merit<sup>(3)</sup>: -22dB

**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

**Transmit Radiation Pattern**



# Technical Data Catalog

## 50/200 kHz – A (200 kHz)

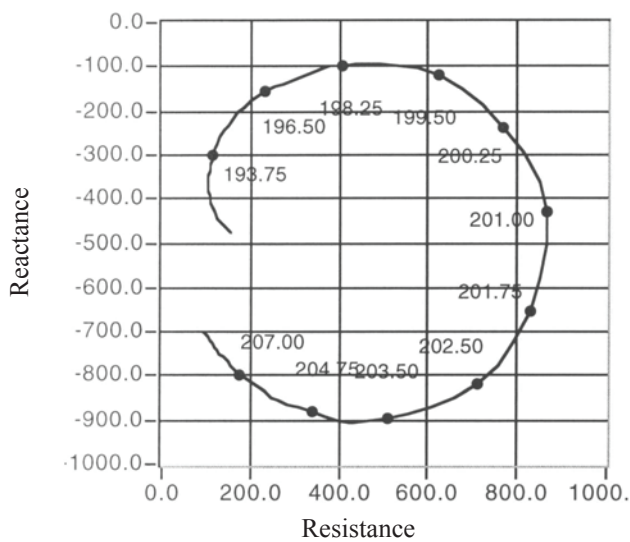
44mm (1.75") PZT

Cable Type: C172

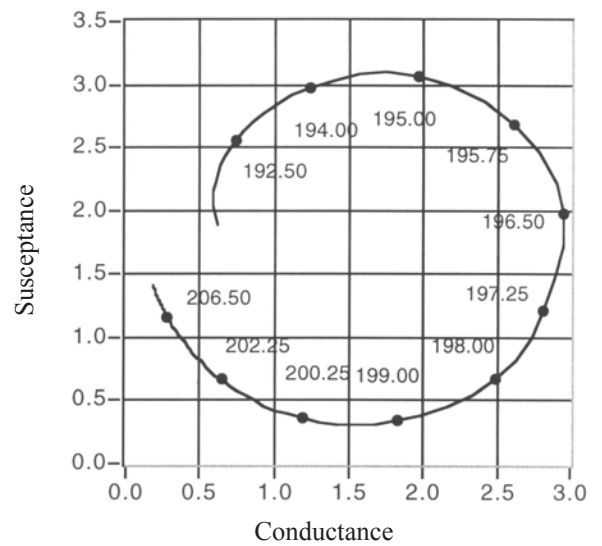
Cable Length: 7.6m (25.0')

| Impedance Data            |                    |                    |
|---------------------------|--------------------|--------------------|
|                           | Balanced           | Unbalanced         |
| Parallel: Rp.             | 340 ohms-20%, +40% | 340 ohms-20%, +40% |
| Parallel: Cp. (nominal)   | 1180 pF            | 2430 pF            |
| Series [R – jX] (nominal) | 300 – j30 ohms     | 235 – j50 ohms     |
| 1 kHz Capacitance         | 2430 pF ±20%       | 3460 pF ±20%       |

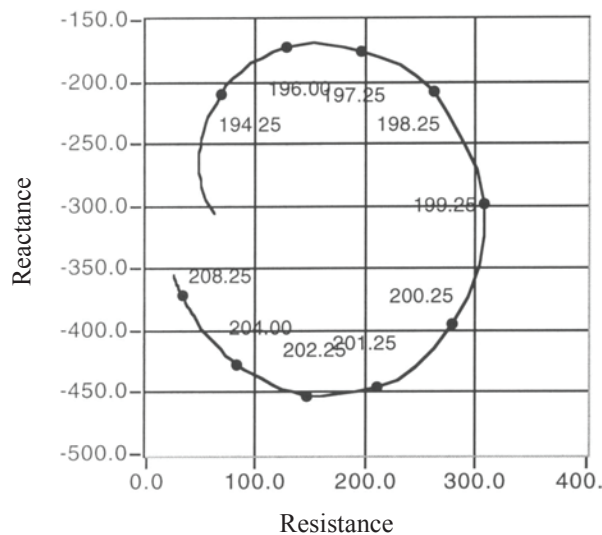
**Unbalanced Impedance**



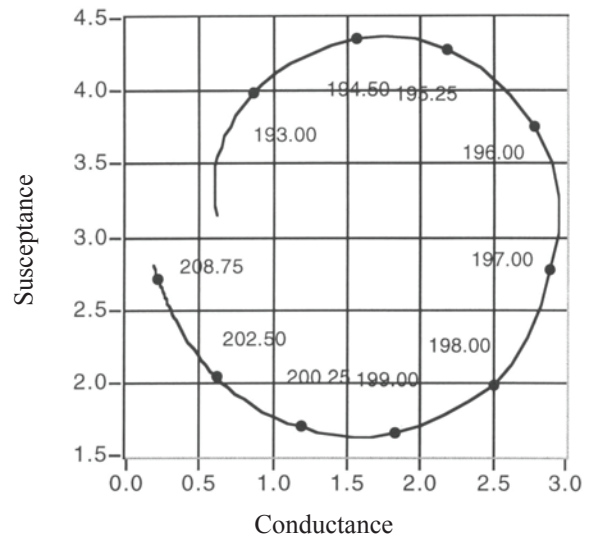
**Unbalanced Admittance**



**Balanced Impedance**



**Balanced Admittance**



### 50/200 kHz – A (50 kHz)

Power rating: 600 W<sub>rms</sub> @ 2% duty cycle  
 44mm (1.75") PZT  
 Active Area: 15.5cm<sup>2</sup>  
 Urethane Window

**Beamwidth:**

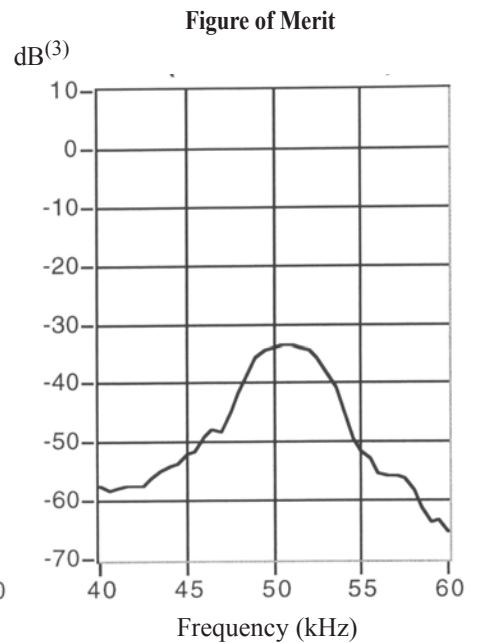
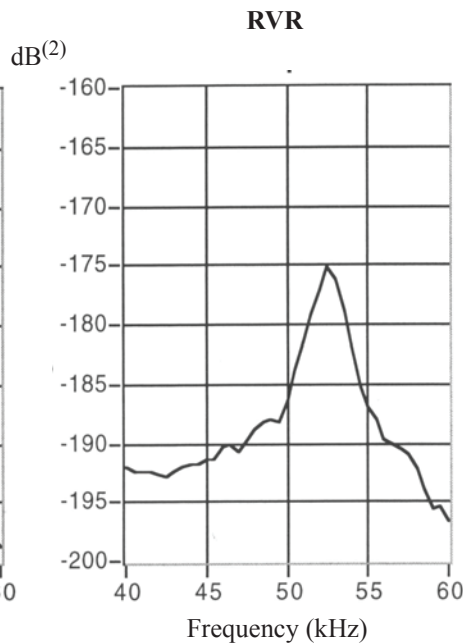
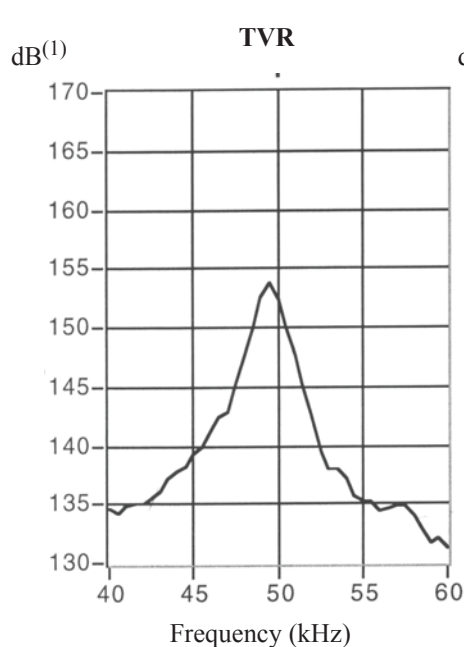
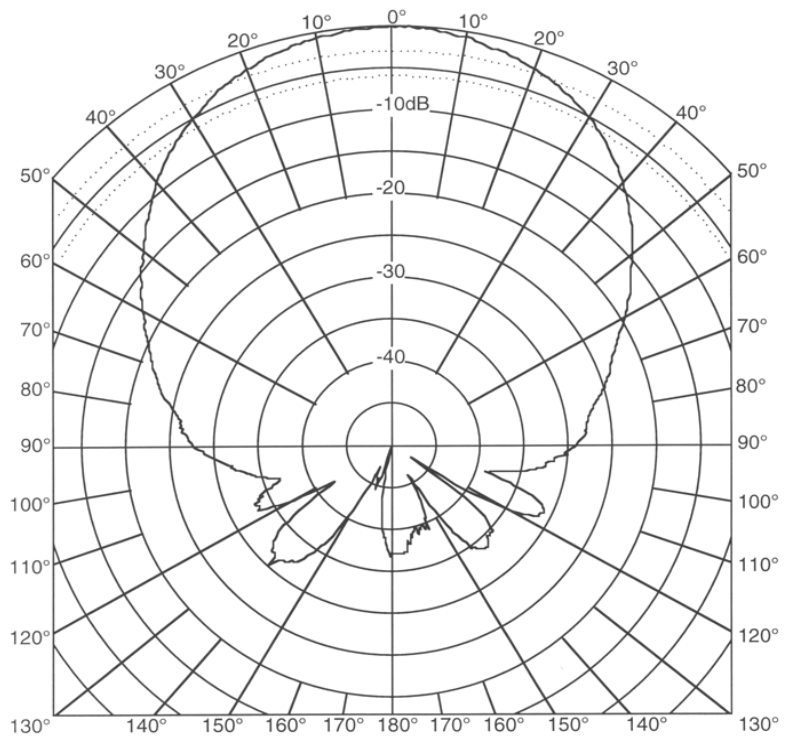
-3 dB: 45°  
 -6 dB: 64°  
 -10 dB: 85°

Directivity Index: 13.6  
 Frequency Tolerance: ±2kHz  
 Peak TVR<sup>(1)</sup>, nominal: 154dB  
 Peak TVR<sup>(1)</sup>, minimum: 152 dB  
 Q (transmit): 28  
 Peak Source Level<sup>(4)</sup>: 206 dB  
 Peak RVR<sup>(2)</sup>, nominal: -175 dB  
 Peak Figure of Merit<sup>(3)</sup>: -33 dB

**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

**Transmit Radiation Pattern**



# Technical Data Catalog

## 50/200 kHz – A (50 kHz)

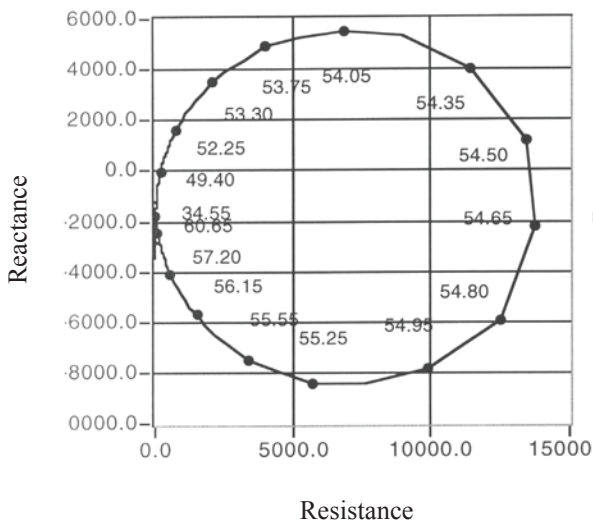
44mm (1.75") PZT

Cable Type: C144

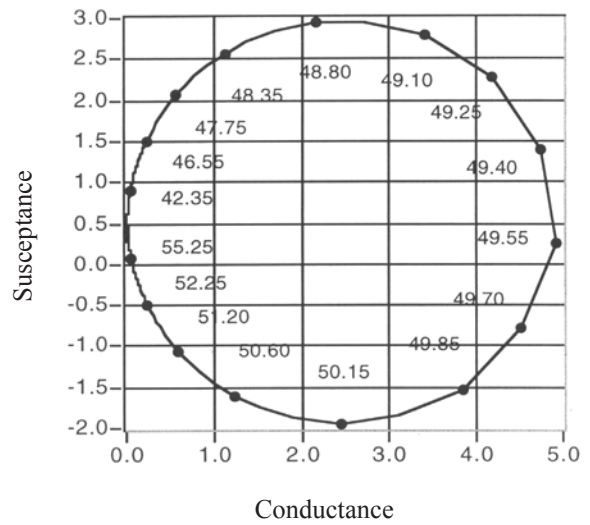
Cable Length: 10.1 m (33.0')

| Impedance Data            |                   |                   |
|---------------------------|-------------------|-------------------|
|                           | Balanced          | Unbalanced        |
| Parallel: Rp.             | 200 ohms-20%,+40% | 200 ohms-20%,+40% |
| Parallel: Cp. (nominal)   | 720pF             | 2210pF            |
| Series [R – jX] (nominal) | 200 – j0 ohms     | 200 – j12 ohms    |
| 1 kHz Capacitance         | 2220pF±20%        | 3400pF±20%        |

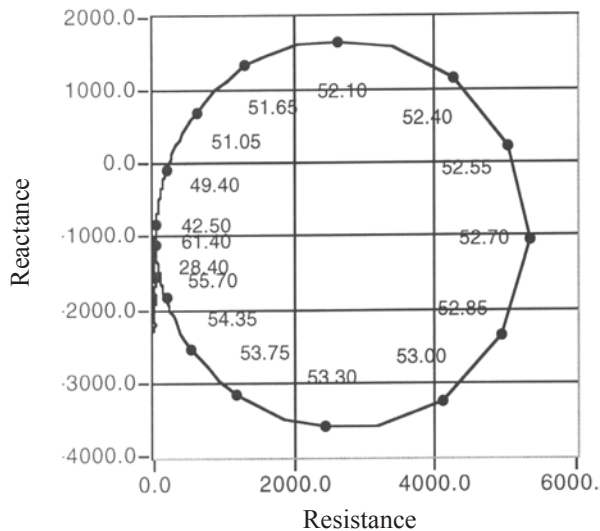
**Unbalanced Impedance**



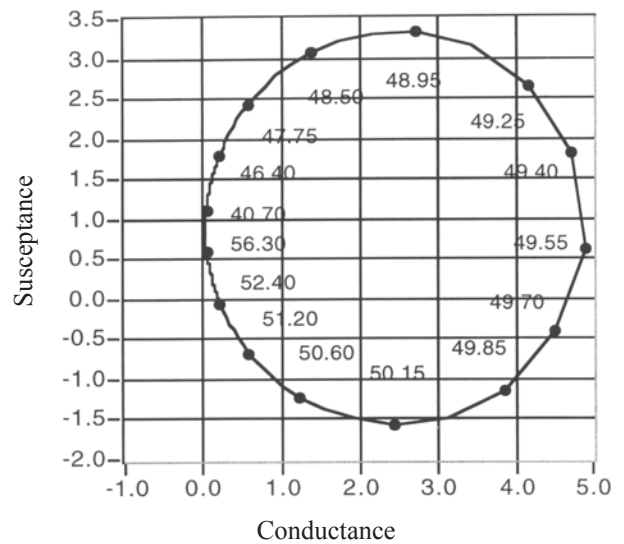
**Unbalanced Admittance**



**Balanced Impedance**



**Balanced Admittance**



### 50/200 kHz – A (200 kHz)

Power rating: 600 W<sub>rms</sub> @ 2% duty cycle  
 44mm (1.75") PZT  
 Active Area: 15.5cm<sup>2</sup>  
 Urethane Window

**Beamwidth:**

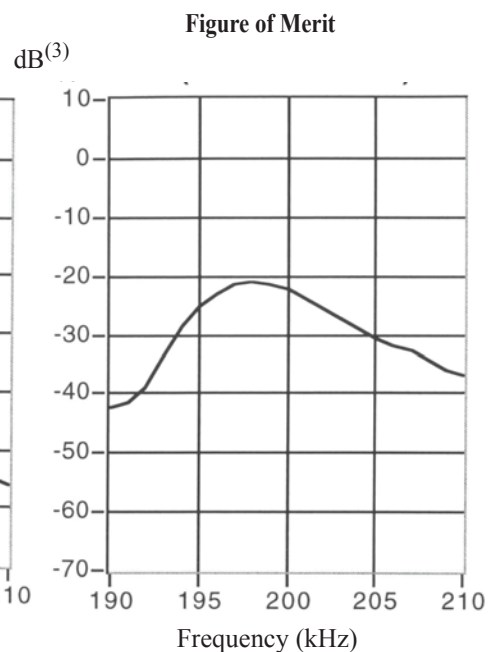
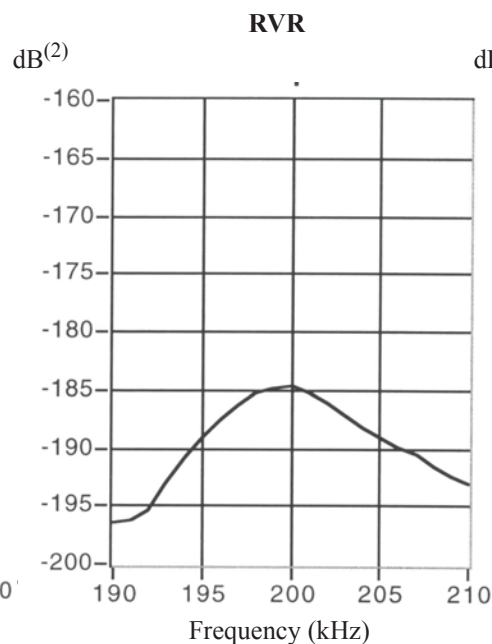
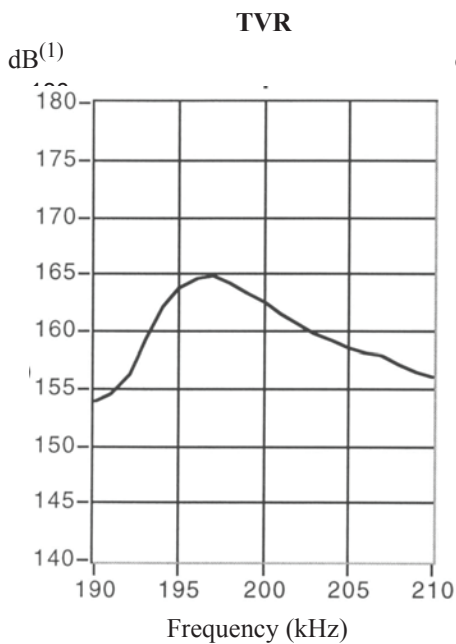
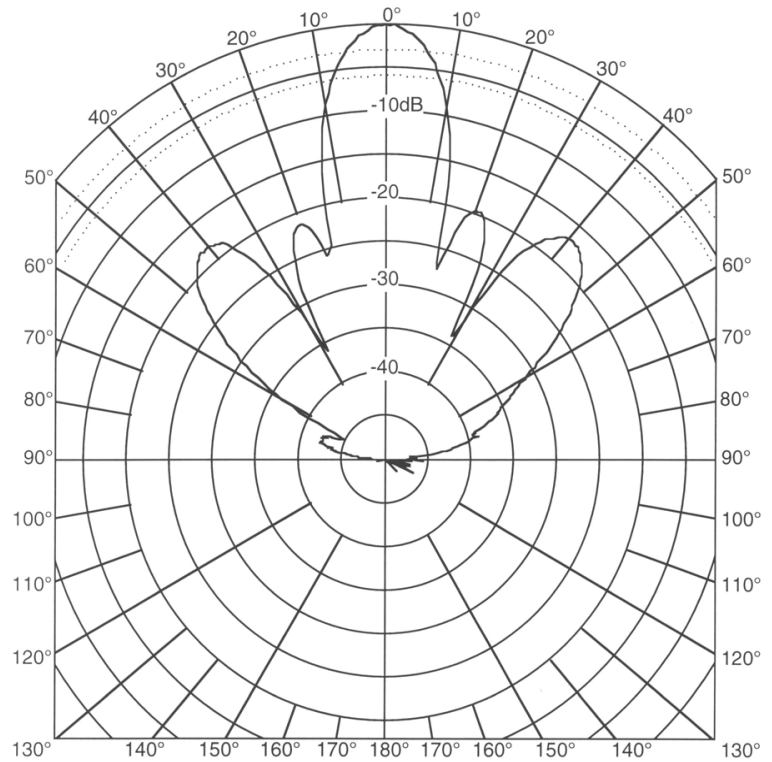
-3 dB: 12°  
 -6 dB: 17°  
 -10 dB: 22°

Directivity Index: 25.6  
 Frequency Tolerance: ±4kHz  
 Peak TVR<sup>(1)</sup>, nominal: 164dB  
 Peak TVR<sup>(1)</sup>, minimum: 162dB  
 Q (transmit): 30  
 Peak Source Level<sup>(4)</sup>: 218dB  
 Peak RVR<sup>(2)</sup>, nominal: -185dB  
 Peak Figure of Merit<sup>(3)</sup>: -21dB

**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

**Transmit Radiation Pattern**



# Technical Data Catalog

## 50/200 kHz – A (200 kHz)

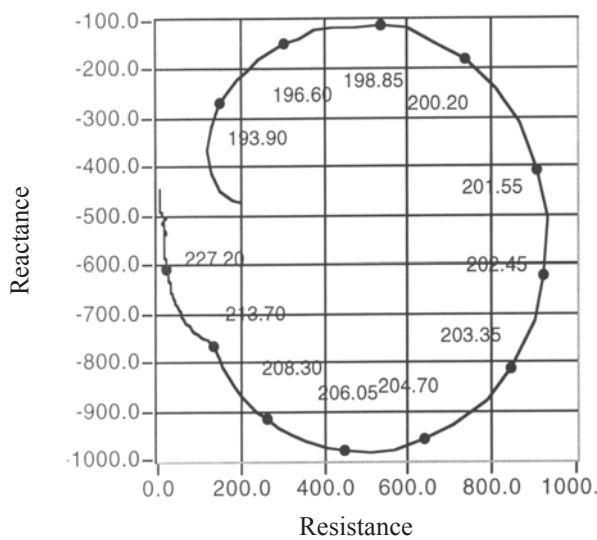
44mm (1.75") PZT

Cable Type: C144

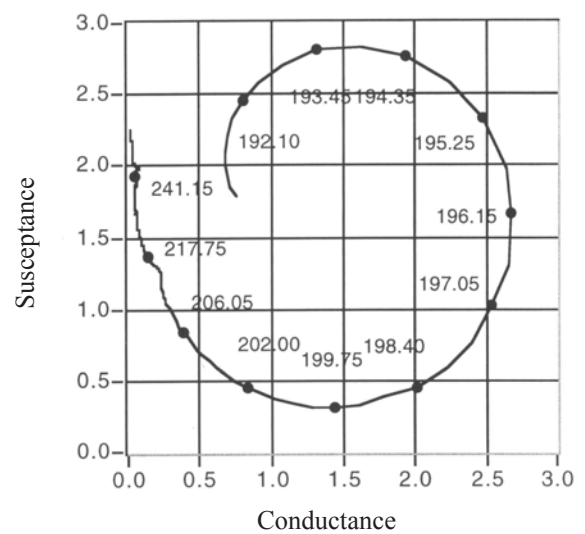
Cable Length: 10.1 m (33.0')

| Impedance Data            |                   |                   |
|---------------------------|-------------------|-------------------|
|                           | Balanced          | Unbalanced        |
| Parallel: Rp.             | 375 ohms-20%,+40% | 375 ohms-20%,+40% |
| Parallel: Cp. (nominal)   | 1200pF            | 2400pF            |
| Series [R – jX] (nominal) | 315 – j30 ohms    | 240 – j50 ohms    |
| 1 kHz Capacitance         | 2210pF±20%        | 3390pF±20%        |

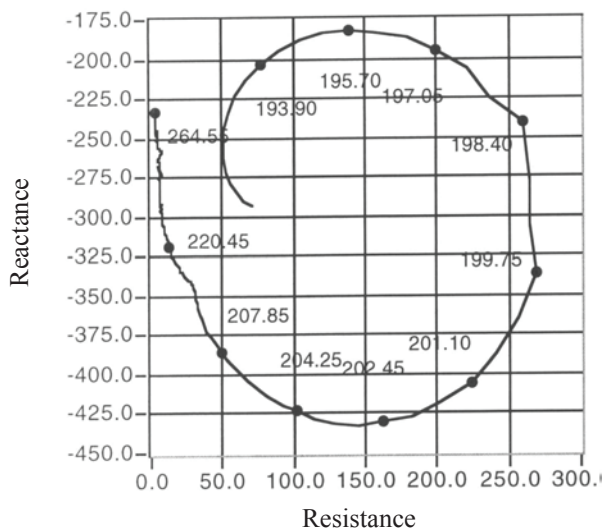
**Unbalanced Impedance**



**Unbalanced Admittance**



**Balanced Impedance**



**Balanced Admittance**

