50/200 kHz – A (50 kHz)

Power rating: 600 Wrms @ 2% duty cycle
44mm (1.75") PZT
Active Area: 15.5 cm²
Layered Plastic Urethane Window

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

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

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Transmit Radiation Pattern

![Transmit Radiation Pattern Graph](image)

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AIRMAR
TECHNOLOGY CORPORATION

Tel: 603.673.9570 • Fax: 603.673.4624 • www.airmar.com
50/200 kHz – A (50kHz)
44mm (1.75"

Cable Type: C2
Cable Length: 7.6m (25.0’)

<table>
<thead>
<tr>
<th></th>
<th>Balanced</th>
<th>Unbalanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel Rp.</td>
<td>300ohms-20%,+40%</td>
<td>300ohms-20%,+40%</td>
</tr>
<tr>
<td>Parallel Cp. (nominal)</td>
<td>2000pF</td>
<td>3000pF</td>
</tr>
<tr>
<td>1 kHz Capacitance</td>
<td>2430pF±20%</td>
<td>3470pF±20%</td>
</tr>
</tbody>
</table>
50/200 kHz – A (200 kHz)

Power rating: 600 W rms @ 2% duty cycle
44 mm (1.75") PZT
Active Area: 15.5 cm²
Layered Plastic Urethane Window

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

Directivity Index: 25.6
Frequency Tolerance: ±4 kHz
Peak TVR(1), nominal: 164 dB
Peak TVR(1), minimum: 162 dB
Q (transmit): 36
Peak Source Level(4): 217 dB
Peak RVR(2), nominal: -185 dB
Peak Figure of Merit(3): -22 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
50/200 kHz – A (200 kHz)

44mm (1.75”) PZT

Cable Type: C172
Cable Length: 7.6 m (25.0’)

<table>
<thead>
<tr>
<th></th>
<th>Balanced</th>
<th>Unbalanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel: Rp.</td>
<td>340 ohms-20%,+40%</td>
<td>340 ohms-20%,+40%</td>
</tr>
<tr>
<td>Parallel: Cp. (nominal)</td>
<td>1180pF</td>
<td>2430pF</td>
</tr>
<tr>
<td>Series [R – jX] (nominal)</td>
<td>300 – j30 ohms</td>
<td>235 – j50 ohms</td>
</tr>
<tr>
<td>1 kHz Capacitance</td>
<td>2430 pF±20%</td>
<td>3460 pF±20%</td>
</tr>
</tbody>
</table>
50/200 kHz – A (50 kHz)

Power rating: 600 Wrms @ 2% duty cycle
44mm (1.75") PZT
Active Area: 15.5 cm²
Urethane Window

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

Directivity Index: 13.6
Frequency Tolerance: ±2 kHz
Peak TVR¹, nominal: 154 dB
Peak TVR¹, minimum: 152 dB
Q (transmit): 28
Peak Source Level⁴: 206 dB
Peak RVR², nominal: -175 dB
Peak Figure of Merit³: -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

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**Transmit Radiation Pattern**

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**TVR**

---

**RVR**

---

**Figure of Merit**
50/200 kHz – A (50 kHz)

44mm (1.75") PZT

Cable Type: C144
Cable Length: 10.1m (33.0’)

### Impedance Data

<table>
<thead>
<tr>
<th></th>
<th>Balanced</th>
<th>Unbalanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel: Rp.</td>
<td>200 ohms -20%, +40%</td>
<td>200 ohms -20%, +40%</td>
</tr>
<tr>
<td>Parallel: Cp. (nominal)</td>
<td>720pF</td>
<td>2210pF</td>
</tr>
<tr>
<td>Series [R – jX] (nominal)</td>
<td>200 – j0 ohms</td>
<td>200 – j12 ohms</td>
</tr>
<tr>
<td>1 kHz Capacitance</td>
<td>2220pF ± 20%</td>
<td>3400pF ± 20%</td>
</tr>
</tbody>
</table>

#### Unbalanced Impedance

- Resistance: 0.0 to 15000
- Reactance: -8000 to 8000

#### Unbalanced Admittance

- Conductance: -1.0 to 5.0
- Susceptance: -3.0 to 3.0

#### Balanced Impedance

- Resistance: 0.0 to 6000
- Reactance: -3000 to 3000

#### Balanced Admittance

- Conductance: -1.0 to 5.0
- Susceptance: -3.0 to 3.0
50/200 kHz – A (200 kHz)

Power rating: 600 W rms @ 2% duty cycle
44 mm (1.75") PZT
Active Area: 15.5 cm²
Urethane Window

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

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

<table>
<thead>
<tr>
<th>Frequency (kHz)</th>
<th>dB(1) TVR</th>
<th>dB(2) RVR</th>
<th>dB(3) Figure of Merit</th>
</tr>
</thead>
<tbody>
<tr>
<td>190</td>
<td>-160</td>
<td>-160</td>
<td>-10</td>
</tr>
<tr>
<td>195</td>
<td>-155</td>
<td>-155</td>
<td>-5</td>
</tr>
<tr>
<td>200</td>
<td>-150</td>
<td>-150</td>
<td>0</td>
</tr>
<tr>
<td>205</td>
<td>-145</td>
<td>-145</td>
<td>5</td>
</tr>
<tr>
<td>210</td>
<td>-140</td>
<td>-140</td>
<td>10</td>
</tr>
</tbody>
</table>
50/200 kHz – A (200 kHz)

44mm (1.75") PZT

Cable Type: C144
Cable Length: 10.1 m (33.0')

### Impedance Data

<table>
<thead>
<tr>
<th></th>
<th>Balanced</th>
<th>Unbalanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel: Rp.</td>
<td>375 ohms-20%,+40%</td>
<td>375 ohms-20%,+40%</td>
</tr>
<tr>
<td>Parallel: Cp. (nominal)</td>
<td>1200 pF</td>
<td>2400 pF</td>
</tr>
<tr>
<td>Series [R – jX] (nominal)</td>
<td>315 – j30 ohms</td>
<td>240 – j50 ohms</td>
</tr>
<tr>
<td>1 kHz Capacitance</td>
<td>2210 pF±20%</td>
<td>3390 pF±20%</td>
</tr>
</tbody>
</table>