50/200 kHz – A (50 kHz)

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

Beamwidth:
-3 dB: 45°
-6 dB: 69°
-10 dB: 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
Technical Data Catalog

50/200 kHz – A (50 kHz)

44mm (1.75"")
Cable Type: C2
Cable Length: 7.6m (25.0')

<table>
<thead>
<tr>
<th>Impedance Data</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>

Unbalanced Impedance

Unbalanced Admittance

Balanced Impedance

Balanced Admittance
50/200 kHz – A (200 kHz)

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

Beamwidth:
-3 dB: 11°
-6 dB: 16°
-10 dB: 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), nominal: 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

Transmit Radiation Pattern

TVR

RVR

Figure of Merit
Technical Data Catalog

50/200 kHz – A (200 kHz)

44mm (1.75") PZT
Cable Type: C172
Cable Length: 7.6 m (25.0')

<table>
<thead>
<tr>
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<th>Unbalanced</th>
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</thead>
<tbody>
<tr>
<td>Parallel: Rp.</td>
<td>340ohms-20%,+40%</td>
<td>340ohms-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>2430pF±20%</td>
<td>3460 pF±20%</td>
</tr>
</tbody>
</table>

Unbalanced Impedance

Unbalanced Admittance

Balanced Impedance

Balanced Admittance
50/200 kHz – A (50 kHz)

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

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

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

---

**TVR**

![Graph of TVR](image)

**RVR**

![Graph of RVR](image)

**Figure of Merit**

![Graph of Figure of Merit](image)
Technical Data Catalog

50/200 kHz – A (50 kHz)

44mm (1.75") PZT

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

<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>2220 pF±20%</td>
<td>3400 pF±20%</td>
</tr>
</tbody>
</table>

Unbalanced Impedance

Unbalanced Admittance

Balanced Impedance

Balanced Admittance

AIRMAR
TECHNOLOGY CORPORATION

www.airmar.com
Technical Data Catalog

50/200 kHz – A (200 kHz)

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

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

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

---

TVR

RVR

Figure of Merit
Technical Data Catalog

50/200 kHz – A (200 kHz)

44mm (1.75") PZT

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

<table>
<thead>
<tr>
<th></th>
<th>Balanced</th>
<th>Unbalanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel: Rp.</td>
<td>375ohms-20%,+40%</td>
<td>375ohms-20%,+40%</td>
</tr>
<tr>
<td>Parallel: Cp. (nominal)</td>
<td>1200pF</td>
<td>2400pF</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>2210pF±20%</td>
<td>3390pF±20%</td>
</tr>
</tbody>
</table>

**Impedance Data**

**Unbalanced Impedance**

**Unbalanced Admittance**

**Balanced Impedance**

**Balanced Admittance**