FMOPC5S SERIES

High Pressure Tolerant Clock
Crystal Oscillator

SPECIFICATIONS

Pressure Tolerant to 480 Bar I 7000 PSI

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>1.00 to 50.00 MHz</td>
</tr>
<tr>
<td>Frequency Stability over Temperature</td>
<td>±50 ppm, -40°C to +85°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-50°C to +100°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55°C to +125°C</td>
</tr>
<tr>
<td>Supply Voltage (Vcc ±5%)</td>
<td>+1.8, +2.5, or +3.3 Vcc</td>
</tr>
<tr>
<td>Logic</td>
<td>CMOS</td>
</tr>
<tr>
<td>Symmetry</td>
<td>45/55%</td>
</tr>
<tr>
<td>Rise &amp; Fall Time</td>
<td>5 ns max</td>
</tr>
<tr>
<td>Start-up time</td>
<td>2 ns max</td>
</tr>
<tr>
<td>Tri-State Control:</td>
<td></td>
</tr>
<tr>
<td>Output Disable “0” Level</td>
<td>0.3 Vdc (max)</td>
</tr>
<tr>
<td>Output Enable “1” Level or Open</td>
<td>0.7 Vdc (min)</td>
</tr>
<tr>
<td>Supply Current</td>
<td>15 mA @ 3.3V max</td>
</tr>
<tr>
<td>RMS Phase Jitter (Integrated 12 kHz to 20 MHz)</td>
<td>1 psec max</td>
</tr>
<tr>
<td>Aging (at 25°C 1st. year)</td>
<td>±3 ppm max</td>
</tr>
<tr>
<td>Hi-Rel Screening / Testing</td>
<td>Available</td>
</tr>
</tbody>
</table>

SHOCK & VIBRATION
Shock: 500g, 0.5 msec, half sine, 3-axis Vibration: 10g, 20 Hz to 2 kHz Random (note: other profiles available, please inquire)

STANDARD MARKING
XXX.XXXM XXXXXXX • FMI YYWW
XXX.XXXM FREQUENCY in MHz XXXXXX Part Number Pin 1 Symbol, FMI, Date Code

PIN FUNCTION TABLE

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Output</td>
<td>2</td>
<td>Case Ground</td>
</tr>
<tr>
<td>3</td>
<td>Output Enable</td>
<td>4</td>
<td>Supply Voltage (Vdd)</td>
</tr>
</tbody>
</table>

APPLICATIONS

- Commercial - In/Off-Ship Surveying, Search and Salvage
- Defense - Port and Harbor Security, Ship Infrastructure and Inspection, Surveillance
- Scientific - Oceanography, Exploration, Research

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FMOPC5S SERIES

High Pressure Tolerant
Crystal Oscillator

Pressure Tolerant to 7000 PSI
1.00 MHz to 50.00 MHz
5 x 7 mm SMD
-50°C to +100°C
+1.8 to +3.3V

SPECIFICATIONS

Frequency Range: 1.00 to 50.00 MHz
Frequency Stability over Temperature: ±50 ppm, -40°C to +85°C
Operating Temperature: -50°C to +100°C
Storage Temperature: -55°C to +125°C
Supply Voltage (Vcc ±5%): +1.8, +2.5, or +3.3 Vcc
Logic: CMOS
Symmetry: 45/55%
Rise & Fall Time: 5 ns max
Start-up time: 2 ns max
Tri-State Control:
- Output Disable “0” Level: 0.3 Vdc (max)
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Supply Current: 15 mA @ 3.3V max
- 10 mA @ 2.5V max
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