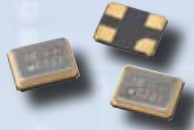


Model 403

Package: 3.2mm x 2.5mm x 0.8mm
Frequency: 12 — 50 MHz
Range
Tolerance: ±30 ppm (std.); ±10 ppm;
 ±15 ppm; ±20 ppm
Stability: ±50 ppm (std.);
 ±10 ppm & ±15 ppm (-20/70°C only);
 ±20 ppm; ±30 ppm; ±40 ppm
Temperature: -20°C to +70°C and -40°C to +85°C
Range
Aging: ±3 ppm/year maximum

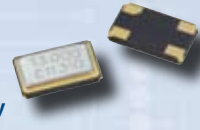
- Popular Size
- Expanding Line
- For New Design Activity



Model 405

Package: 5.0mm x 3.2mm x 1.0mm
Frequency: 12 — 50 MHz
Range
Tolerance: ±30 ppm (std.); ±10 ppm;
 ±15 ppm; ±20 ppm
Stability: ±50 ppm (std.);
 ±10 ppm & ±15 ppm (-20/70°C only);
 ±20 ppm; ±30 ppm; ±40 ppm
Temperature: -20°C to +70°C and -40°C to +85°C
Range
Aging: ±3 ppm/year maximum

- Popular Size
- Shock Resistant
- For New Design Activity



ATS-SM Series

Package: HC-49/US-SM
 (12.3mm x 4.8mm x 4.3mm)
Frequency: 3.5 — 60 MHz
Range
Tolerance: ±30 ppm std.
Stability: ±50 ppm std.
Temperature: -20°C to +70°C;
 -40°C to +85°C available
Range
Aging: ±5 ppm/year maximum

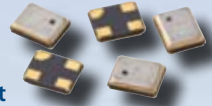
- Low Cost
- Reliable Product
- Proven Performance



Model 425

Package: 2.5mm x 2.0mm x 0.65mm
Frequency: 16 — 54 MHz
Range
Tolerance: ±30 ppm (std.); ±10 ppm;
 ±15 ppm; ±20 ppm
Stability: ±50 ppm (std.);
 ±10 ppm & ±15 ppm (-20/70°C only);
 ±20 ppm; ±30 ppm; ±40 ppm
Temperature: -20°C to +70°C and -40°C to +85°C
Range
Aging: ±3 ppm/year maximum

- Emerging Product
- Limited Frequencies
- Small Package Footprint

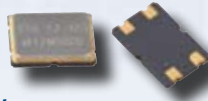


New

Model 407

Package: 7.0mm x 5.0mm x 1.2mm
Frequency: 6.0 — 156.25 MHz
Range
Tolerance: ±30 ppm (std.); ±10 ppm;
 ±15 ppm; ±20 ppm
Stability: ±50 ppm (std.);
 ±10 ppm & ±15 ppm (-20/70°C only);
 ±20 ppm; ±30 ppm; ±40 ppm
Temperature: -20°C to +70°C and -40°C to +85°C
Range
Aging: ±3 ppm/year maximum

- Low Profile
- Wide Frequency Range
- Tight Tolerance / Stability



Model 406

Package: 6.0mm x 3.5mm x 1.2mm
Frequency: 10 — 50 MHz
Range
Tolerance: ±30 ppm (std.); ±10 ppm;
 ±15 ppm; ±20 ppm
Stability: ±50 ppm (std.);
 ±10 ppm & ±15 ppm (-20/70°C only);
 ±20 ppm; ±30 ppm; ±40 ppm
Temperature: -20°C to +70°C and -40°C to +85°C
Range
Aging: ±3 ppm/year maximum

- Low Profile
- Wide Frequency Range
- Tight Tolerance / Stability



ATS Series

Package: HC-49/US
 (10.8mm x 4.5mm x 3.68mm)
Frequency: 3.5 — 60 MHz
Range
Tolerance: ±30 ppm std.
Stability: ±50 ppm std.
Temperature: -20°C to +70°C;
 -40°C to +85°C available
Range
Aging: ±5 ppm/1st year

- Low Cost
- Legacy Thru-Hole
- Proven Performance



MP Series

Package: HC-49/U
 (10.85mm x 13.46mm x 4.65mm)
Frequency: 1.8 — 48 MHz
Range
Tolerance: ±30 ppm std.
Stability: ±50 ppm std.
Temperature: -20°C to +70°C;
 -40°C to +85°C available
Range
Aging: ±5 ppm/1st year

- Legacy Thru-Hole
- Not for New Designs



Application Details

Minimum performance requirements needed in order to provide CTS part number.

1. Operating Frequency
2. Calibration Tolerance @ 25°C
3. Frequency Stability and Temperature Range
4. Load Capacitance (Parallel [__pF] or Series)
5. Package Type

Program Details

1. Product Application
2. EAU
3. Prototype Requirements
4. Production Start Date

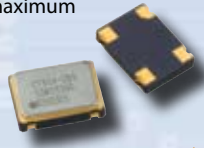
Additional Information Is Available Through:



CTS Frequency Components
are RoHS Compliant

CB3/CB3LV

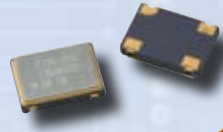
Package: 7.0mm x 5.0mm x 1.8mm
Frequency Range: 1.5 — 160 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.);
 ±25 ppm; ±20 ppm (-20/70°C only)
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +3.3V; +5.0V
Output: CMOS/TTL Compatible
Aging: ±5 ppm/year maximum



- Low Cost
- Excellent Phase Noise

CB2V5

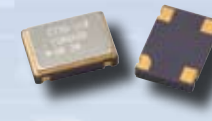
Package: 7.0mm x 5.0mm x 1.8mm
Frequency Range: 1 — 125 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.);
 ±25 ppm; ±20 ppm (-20/70°C only)
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +2.5V
Output: CMOS
Aging: ±5 ppm/year maximum



- Low Jitter
- Standby Function

CB1V8

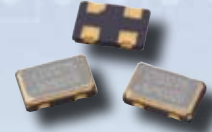
Package: 7.0mm x 5.0mm x 1.8mm
Frequency Range: 1 — 70 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.);
 ±25 ppm; ±20 ppm (-20/70°C only)
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +1.8V
Output: CMOS
Aging: ±5 ppm/year maximum



- Low Voltage
- AT-Cut Strip Crystal

Model 636

Package: 5.0mm x 3.2mm x 1.3mm
Frequency Range: 1.5 — 125 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.);
 ±25 ppm; ±20 ppm (-20/70°C only)
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +1.8V; +2.5V; +3.3V; +5.0V
Output: CMOS/TTL Compatible
Aging: ±5 ppm/year maximum



- Low Profile
- Low Input Current

Model 632

Package: 3.2mm x 2.5mm x 1.2mm
Frequency Range: 1 — 75 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.); ±25 ppm
Temperature Range: 0°C to +70°C; -40°C to +85°C
Supply Voltage: +1.8V; +2.5V; +2.8V; +3.3V
Output: CMOS
Aging: ±5 ppm/year maximum



- Emerging Product
- Shock Resistant

New

Model 625

Package: 2.5mm x 2.0mm x 1.0mm
Frequency Range: 1 — 50 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.); ±25 ppm
Temperature Range: -10°C to +70°C; -40°C to +85°C
Supply Voltage: +1.8V; +2.5V; +3.3V
Output: CMOS
Aging: ±3 ppm/year typical,
 ±5 ppm maximum

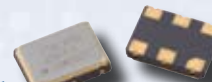


- Limited Frequencies
- Small Package Footprint

New

Model 635

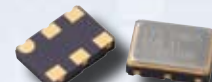
Package: 7.0mm x 5.0mm x 2.0mm
Frequency Range: 19.44 — 212.5 MHz
 (Fundamental and 3rd Overtone)
Stability: ±50 ppm (std.); ±25 ppm
 ±20 ppm (-20/70°C only)
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +2.5V; +3.3V
Output: LVPECL, LVDS
Aging: ±5 ppm/year maximum



- Complimentary Output
- Best Noise Performance

Model 658

Package: 7.0mm x 5.0mm x 2.0mm
Frequency Range: 38 — 750 MHz
 (Multiplication)
Stability: ±50 ppm (std.); ±25 ppm
Temperature Range: 0°C to +70°C; -40°C to +85°C
Supply Voltage: +2.5V; +3.3V
Output: LVPECL, LVDS, CMOS
Aging: ±5 ppm/year maximum



- PLL Technology
- Lower Cost Over M635

CP5/CP7 Programmable

Package: 5.0mm x 3.2mm x 1.2mm (CP5); 7.0mm x 5.0mm x 1.6mm (CP7)
Frequency Range: 2 - 200 MHz
Stability: ±50 ppm
Temperature Range: -20°C to +70°C; -40°C to +85°C
Supply Voltage: +3.3V, +2.5V
Output: CMOS
Aging: ±5 ppm/year maximum



- Quick Turn Prototypes Thru CTS Authorized Distributors

Application Details:

Minimum performance requirements needed in order to provide CTS part number.

1. Operating Frequency
2. Output Type
3. Supply Voltage
4. Frequency Stability/Operating Temperature Range
5. Package Type

Program Details:

1. Product Application
2. EAU
3. Prototype Requirements
4. Production Start Date