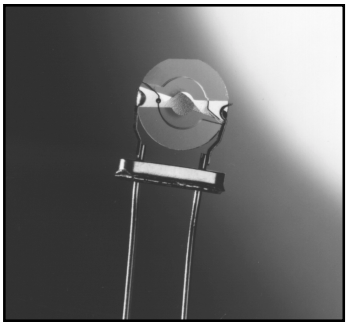
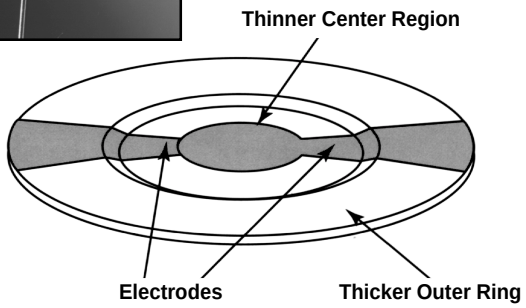
Custom Crystals
HFF Series



Features:

- Frequency Range 30-300 MHz
- HC-45 or HC-35 enclosures
- High Motional Capacitance
- Superior unwanted mode suppression
- Thru-hole or surface mount formed leads
- Small package; rugged construction



Inverted Mesa Technology uses CTS Reeves proprietary methods to achieve extremely thin (but still mechanically rugged) resonators at high frequencies for options not previously available to VCXO and filter designers. Previously, high frequency resonators required overtone crystals with their low C1 and significant unwanted modes, but now fundamental resonators to 160 MHz and 3rd O.T. up to 300 MHz opens a new era for filtering and FM circuit design.

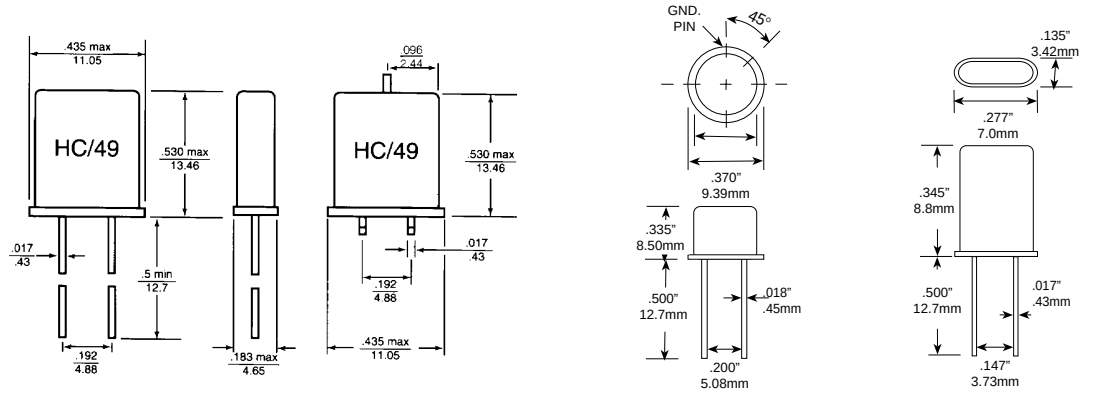
Electrical Specifications:

Frequency MHz	Overtone Mode	Max R ohms	Std Cal Tol PPM @25°	Typ C_1 fF	Typ C_0 pF
30-40	Fund.	20	±20	5-15	2-5
41-70	Fund.	25	±25	5-12	2-4
71-100	Fund.	30	±30	4-8	1.5-3.0
101-160	Fund.	35	±35	3-6	1.0-2.5
90-160	3rd	80	±25	.25-.60	1.5-3.5
161-300	3rd	100	±30	.25-.60	1.0-3.0

CTS Reeves
FREQUENCY PRODUCTS

Custom Crystals Series

Outline Drawing - Solder Pad Dimensions:



Mechanical Specifications

Package Type
Metal cover, Hermetic seal base, resistance weld or coldweld seal.

Hermeticity
<1x10-8 std.cc/sec/atm

Mechanical Shock
1000G/1msec; # blows ea axis; <5PPM shift F; <10% shift R

Vibration
10G/10-500 hz, 2hrs duration, <5PPM shift F; <10% shift R;

Solderability
63/37 solder @ 245°C for 5 sec; RMA flux; >95% coverage

Storage Temperature
-55+105°C (solderability will deteriorate in high temp or humidity)

Insulation Resistance
>500 Mohm @ 100v

Ordering Information:

Sealing Method
R = Resistance weld
K = Coldweld

Mode
1 = Fundamental
3 = 3rd O.T.

25°C Calibration
1 = ±10 ppm
2 = ±20 ppm
3 = ±30 ppm
4 = ±40 ppm
5 = ±50 ppm
6 = ±100 ppm

Stability Over Temp.
1 = ±10 ppm
2 = ±20 ppm
3 = ±30 ppm
4 = ±40 ppm
5 = ±50 ppm
6 = ±100 ppm

Temperature Range
A = 0° to 70°C
B = -40° to 85°C
D = special*

*SPECIAL - to BE SPECIFIED ON P.O.

Load
00 = Series
10 thru 99 for load

Frequency
FFF.FFFFFFMHz

Package		
B = HC-49	E = HC-45	T = HC-35
F = HC-49SM	G = HC-45SM	

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