

Features:

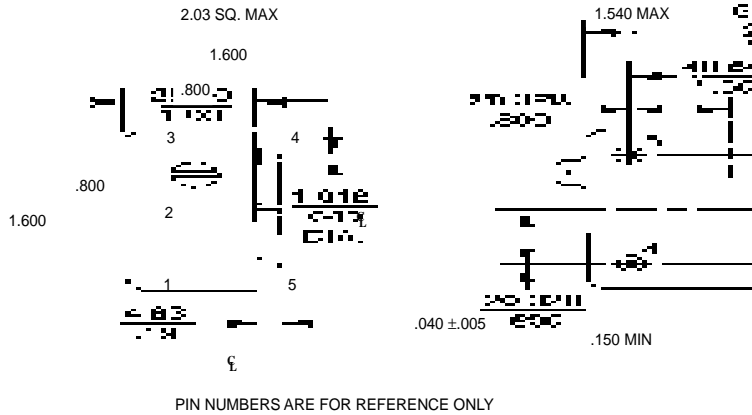
- Double Oven
- Small Size
- High Stability
- Electrical Frequency Adjust
- 5 to 15 MHz



The Model 115 is a high performance double oven OCXO housed in a small package. The use of a 5 MHz 3rd overtone SC coldweld crystal provides for excellent long term aging performance. Applications include CDMA base station reference and Stratum II clock.

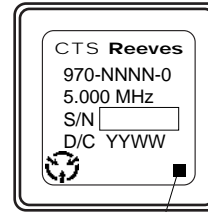
Electrical Specifications:

<i>Parameter</i>	<i>Available Frequencies</i>		
	5.0, 10.0, or 15.0 MHz		
Input Voltage	+12.0 Vdc \pm 5%		
Supply Current (@25°C) Warm-up Steady State	10 Watts 4 Watts		
Output (50 ohm load)	Sinewave +7.0 dBm \pm 1.5 dB		
Load	50 Ω		
Harmonicas	-35 dBc		
Sub-Harmonics (10 & 15 MHz output)	-40 dBc		
Spurious	-80 dBc		
Warm-up Referenced to the frequency @ 1 hr.	\pm 2 x 10 ⁻⁸ in 15 minutes		
Phase Noise (5 MHz) (dBc/Hz) (1 Hz Bandwidth)	Offset	Standard	Low Noise
	1 Hz	-85	-85
	10 Hz	-115	-115
	100 Hz	-140	-140
	1 kHz	-145	-150
Frequency Stability vs Voltage (\pm 5%)	\pm 3 x 10 ⁻¹¹		
Electrical Frequency Adjust (positive slope)	Sufficient for 10 years 0 to +5 Vdc		



Pin Connections

PIN	FUNCTION
1	EFC
2	VOLTAGE REF.
3	RF OUTPUT
4	GROUND, CASE
5	12V



PIN 1 INDICATOR

Mechanical Specifications:

Case:

Metal, hermetically sealed

Leads:

Kovar, solder coated

Seal:

Solder Seal

Leak Test:

Leak rate less than 5×10^{-5}
Atmosphere-cc/sec of helium

Solderability:

95% solder coverage, using RMA flux 63
SN/37 Pb at $+245^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Temperature:

Operating: See chart
Storage: -55° to 85°C

Vibration:

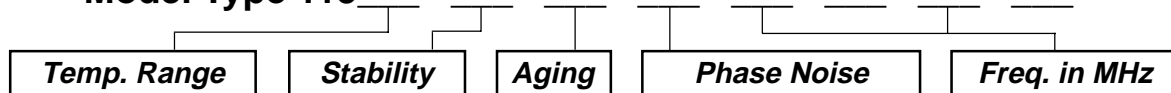
5 G's sine, 10 to 200 Hz

Mechanical Shock:

50 G's 5ms pulse (3 shock/plane)

Ordering Information:

Model Type 115



Temp Stability (see note)		2×10^{-10}	4×10^{-10}	6×10^{-10}
Temp Range	Code	A	B	C
0° to $+50^{\circ}\text{C}$	A	X	X	X
0° to $+65^{\circ}\text{C}$	B	X	X	X
0° to $+75^{\circ}\text{C}$	C	X	X	X
-30° to $+75^{\circ}\text{C}$	D			X

1 st Year Aging	Per Day Aging	Code
$\pm 2 \times 10^{-8}$	$\pm 5 \times 10^{-11}$	A
$\pm 3 \times 10^{-8}$	$\pm 1 \times 10^{-10}$	B
$\pm 5 \times 10^{-8}$	$\pm 3 \times 10^{-10}$	C

Phase Noise	Code
Standard	A
Low Noise	B

Note: Temperature stability is total change (peak to peak).
Not all options are available at all frequencies. Consult factory for details.