

1. Specification

Frequency range:	4.096 MHz ... 16.384 MHz	
Standard frequencies (1) :	4.096; 4.9152; 5.0; 5.115; 5.120; 5.184; 6.4; 8.192; 9.8304; 10.0; 10.23; 10.24; 10.368 MHz	
Standard frequencies (2), multiplied frequencies :	12.0; 12.8; 13.0; 14.4; 16.384 MHz	
Type:	B	C
Frequency stability in the temperature range - 20°C to + 70°C:	< ± 2.5x10 ⁻⁸ (1) < ± 5x10 ⁻⁸ (2) < ± 1x10 ⁻⁷ (3)	< ± 5x10 ⁻⁹ (1) < ± 1x10 ⁻⁸ (2) < ± 2x10 ⁻⁸ (3)
vs. supply voltage changes UB ± 5 %: vs. load changes 50 Ohm ± 10 %:	< ± 2x10 ⁻⁹ < ± 2x10 ⁻⁹	< ± 1x10 ⁻⁹ < ± 1x10 ⁻⁹
Long term stability after 30 days of operation:	< ± 3x10 ⁻⁹ per day < ± 1x10 ⁻⁷ per year	< ± 5x10 ⁻¹⁰ per day < ± 5x10 ⁻⁸ per year
Short term stability:	< ± 1x10 ⁻¹¹ (typ. 5x10 ⁻¹²)	
Frequency control range with ext. trimmer 20 kOhm or external voltage 1 ... 5 V:	≥ ± 4x10 ⁻⁷	≥ ± 3x10 ⁻⁷
Supply voltage UB:	12 V ± 10 %	
Current consumption at steady state @ - 20°C: @ + 25°C:	< 40 mA < 30 mA	< 110 mA < 85 mA
Peak Current consumption during warm-up:	< 400 mA	< 600 mA
Warm-up time within ≤ ± 1x10 ⁻⁷ : within ≤ ± 5x10 ⁻⁸ :	< 7min. @ -20°C < 5min. @ +25°C < 8.5min. @ -20°C < 7.0min. @ +25°C	
Temperature ranges Operating: Storage:	-20°C ... + 70°C -55°C ... + 85°C	
Output voltage : level:	Sinewave > 225 mV into 50 Ohm load	

OCXO-PILOT

Phase noise:

Frequencies (1):

1 Hz
10 Hz
100 Hz
1000 Hz

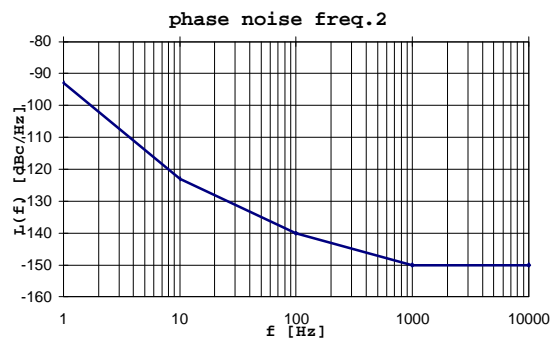
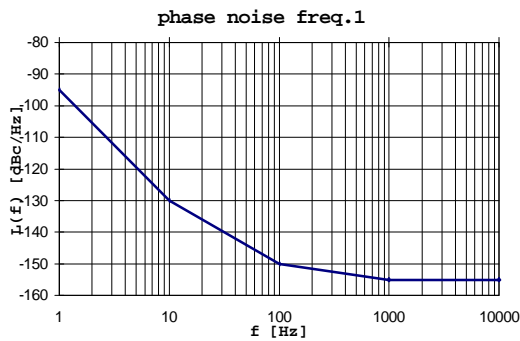
-95 dBc/Hz
-130 dBc/Hz
-150 dBc/Hz
-155 dBc/Hz

Frequencies (2):

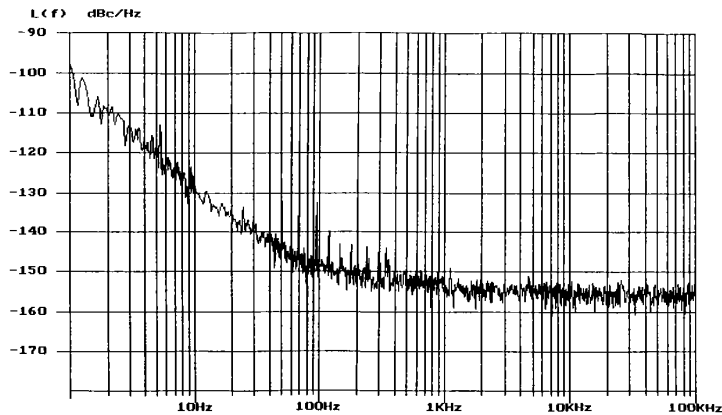
1 Hz
10 Hz
100 Hz
1000 Hz

-93 dBc/Hz
-123 dBc/Hz
-140 dBc/Hz
-150 dBc/Hz

Phase noise:



Typical phase noise for type OCXO-PILOT C2X 10 MHz:



Harmonic suppression

min. 30 dB

Ordering data:

e.g. OCXO-PILOT 16,384 MHz,

Version C

temperature stability: $\leq \pm 1 \times 10^{-8}$:

Case: BF-131 code Z :

C

2

Z

⇒ **OCXO-PILOT C2Z, 16,384 MHz**



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2. Environmental conditions

Shock:	DIN IEC 68-2-27, Test Ea, 100 g, 6ms Half-sine, 3 bumps in 3 main directions
Vibration:	DIN IEC 68-2-6, Test Fc, 10-500Hz, 10g, 2 h in 3 main directions
Humidity:	DIN IEC 68-2-3, 40°C/93%RH, 21 days
Solderability:	DIN IEC 68-2-20 only for wire leads, Methode 3: Solder globule at + 235°C

3. Marking

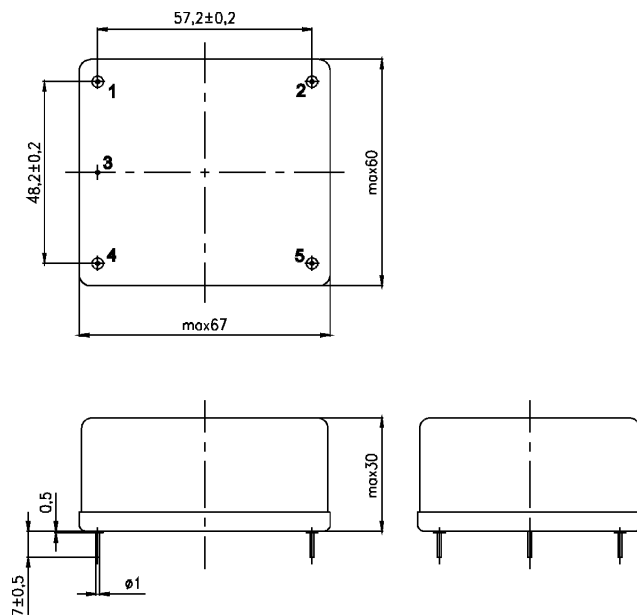
Manufacturer's name, date code(week/year);
Specification;
Center frequency

4. Case

Sizes:

BF-133 67 x 60 x 30 mm (X)
BF-138 51,3 x 41,3 x 25 mm (Y)
BF-131 50 x 50 x 25,4 mm (Z)

Case style: BF-133

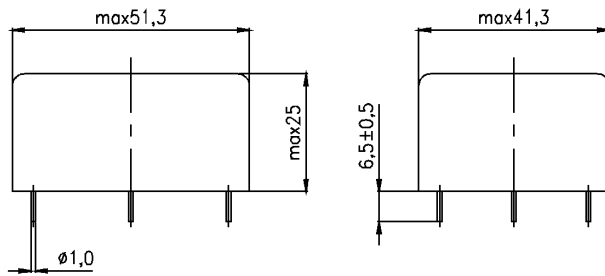
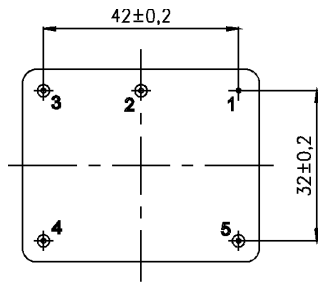


Pin configuration

1. RF-output
2. Potentiometer (Vref out)
3. Ground, case, potentiometer
4. Potentiometer SL (VC in)
5. Supply voltage

OCXO-PILOT

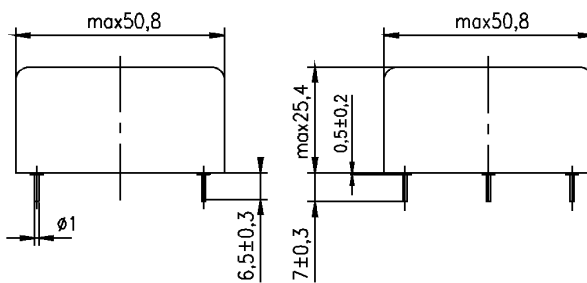
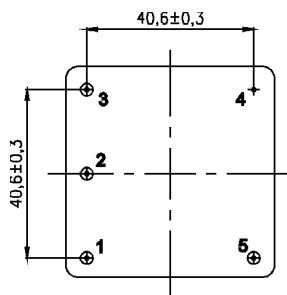
Case style: BF-138



Pin configuration

1. Ground, case, potentiometer
2. Potentiometer SL (VC in)
3. Potentiometer (Vref out)
4. Supply voltage
5. RF-output

Case style: BF-131



1.Pin configuration

1. Potentiometer SL (VC in)
2. Potentiometer (Vref out)
3. RF-output
4. Ground, case, potentiometer
5. Supply voltage

5. Test circuits

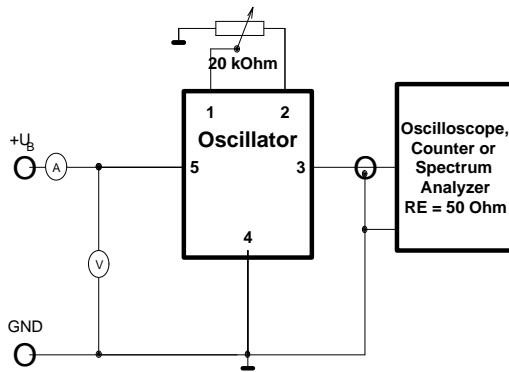


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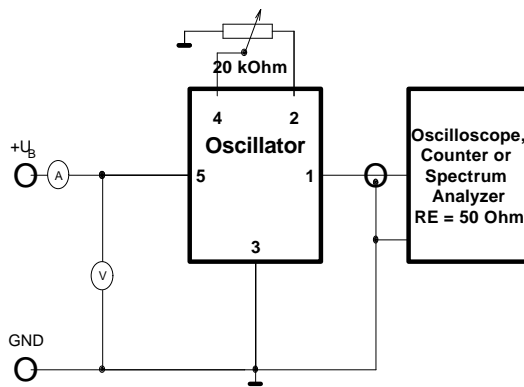
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Test circuit BF-131



Test circuit BF-133



Test circuit BF-138

