

OCXO-PRIDE

1. Specification

Frequency range:	4.096 MHz ... 16.384 MHz	
Standard frequencies (1) :	8.192; 10.0; 12.0; 12.8; 13.0; 14.0; 14.4; 16.384 MHz	
Type:	A	B
Frequency stability in the temperature range - 25°C to + 70°C:	$< \pm 5 \times 10^{-10}$ (1) $< \pm 1 \times 10^{-9}$ (2) $< \pm 2 \times 10^{-9}$ (3)	
vs. supply voltage changes $U_B \pm 10$ %:	$< \pm 3 \times 10^{-10}$	
vs. load changes 50 Ohm ± 10 %:	$< \pm 3 \times 10^{-10}$	
Long term stability after 30 days of operation:	$< \pm 5 \times 10^{-10}$ per day $< \pm 5 \times 10^{-8}$ per year $< \pm 3 \times 10^{-7}$ in 10 years	
Short term stability(allan variance) 1 s:	$< 5 \times 10^{-12}$	
Frequency control range with ext. trimmer 20 kOhm or external voltage 1 ... 5 V:	$\geq \pm 3 \times 10^{-7}$	
Supply voltage U_B :	12 V ± 10 %	
Current consumption at steady state @ - 25°C: @ + 25°C:	< 250 mA < 200 mA	
Peak Current consumption during warm-up:	< 500 mA	
Warm-up time within $\leq \pm 1 \times 10^{-7}$: within $\leq \pm 5 \times 10^{-8}$:	< 7 min.@ -20°C < 5 min.@ +25°C < 8.5 min.@ -20°C < 7.0 min.@ +25°C	
Temperature ranges Operating: Storage:	-25°C ... + 70°C -55°C ... + 85°C	
Output voltage : load: Duty cycle Harmonic suppression	Sinewave > 225 mV 50 Ohm > 30 dB	HCMOS 1 kOhm // 15 pF 45% ...55%



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OCXO-PRIDE

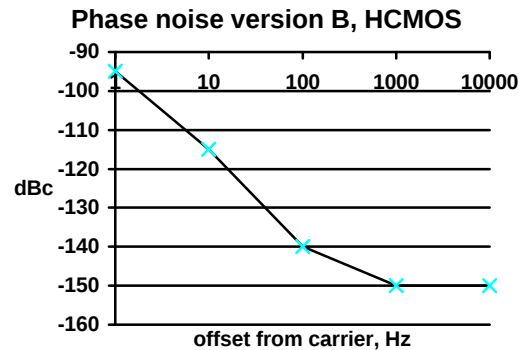
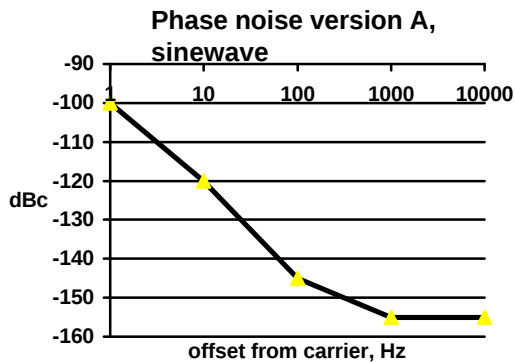
typ. phase noise:

1 Hz
10 Hz
100 Hz
1000 Hz
10000 Hz

-100 dBc/Hz
-120 dBc/Hz
-145 dBc/Hz
-155 dBc/Hz
-155 dBc/Hz

- 95 dBc/Hz
-115 dBc/Hz
-140 dBc/Hz
-150 dBc/Hz
-150 dBc/Hz

Phase noise:



Typical phase noise for OCXO-PRIDE 16,384 MHz

Ordering data:

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

Version A (sinewave):

temperature stability: $\leq \pm 1 \times 10^{-9}$:

Case: BF-131 code Z :

A

2

Z $\Rightarrow$ **OCXO-PRIDE A2Z, 16,384 MHz**

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



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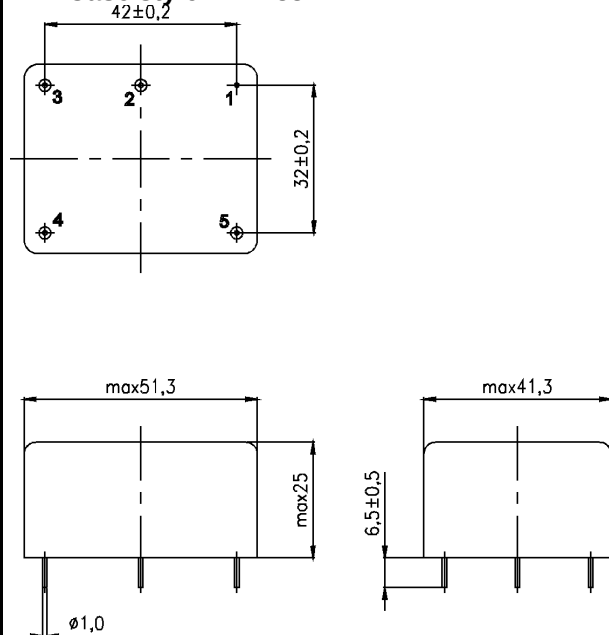
4. Case

Sizes:

BF-138 51,3 x 41,3 x 25 mm (Y)

BF-131 50 x 50 x 25,4 mm (Z)

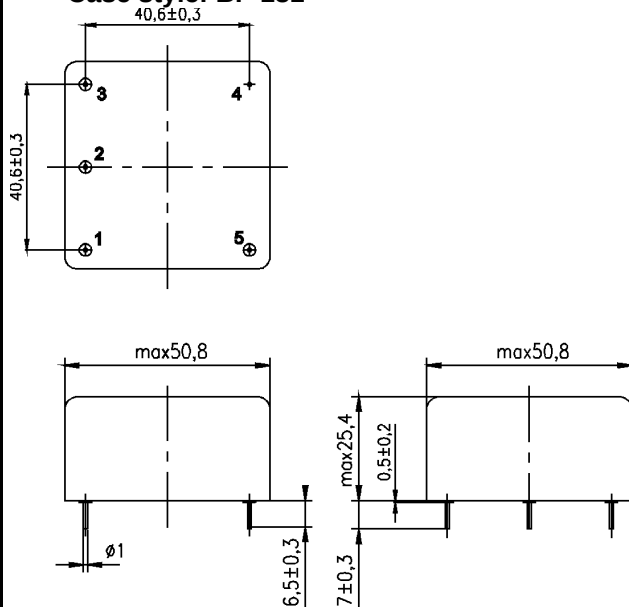
Case style: BF-138



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

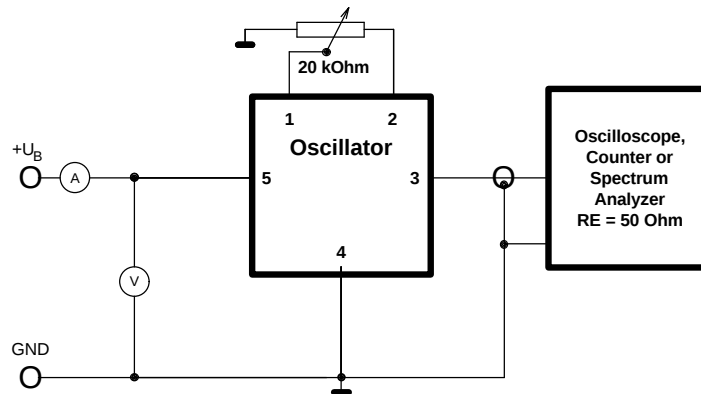


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Test circuit BF-131, sinewave



Test circuit BF-138, HCMOS

