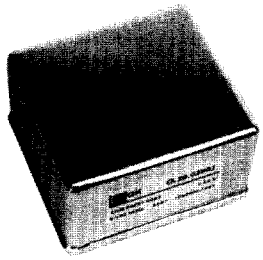
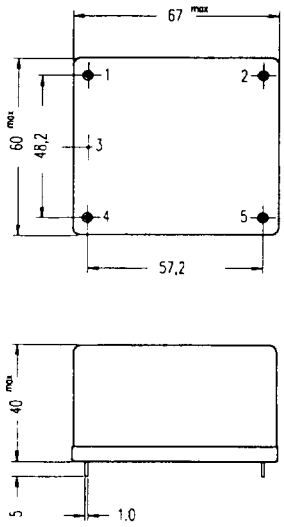
Ultra Stable OCXOs

Series 2000



FEATURES

- **Frequency range** **2 to 25 MHz**
  50 to 160 MHz
- **Excellent temperature stability (-20 to +70°C)** **to ≤ ± 1 x 10^{-9}**
- **Short term stability Allan variance** **to ≤ 3 x 10^{-12}**
- **Standard package**
- **AT, SC, BT cut**



Note: Dimensions in mm

SPECIFICATIONS

Model Variation by suffix **A** standard **B** long term stability **C** short term stability **D** tuning range **E** high frequency

Selection guide

All specifications are guaranteed data

	Ultra Stable Oven Controlled Crystal Oscillators Series 2000					
	A	**B**	**C**	**D**	**E**	Options
Long term stability per year	<1*10^{-8}	<5*10^{-9}	<3*10^{-8}	<1*10^{-7}	<3*10^{-7}	
Short term stab. Allan var. for Tau = 1 sec.	<5*10^{-11}	<5*10^{-12}	<3*10^{-12}	<5*10^{-10}	<5*10^{-11}	
Frequency stability versus:						
– operating temperature range	<±3*10^{-9}	<±1*10^{-9}	<±3*10^{-9}	<±5*10^{-8}	<±3*10^{-8}	
– load variation +/- 5%	<±2*10^{-10}	<±5*10^{-11}	<±2*10^{-10}	<±1*10^{-9}	<±5*10^{-9}	
– supply voltage variation +/- 5%	<±1*10^{-10}	<±1*10^{-10}	<±1*10^{-10}	<±2*10^{-9}	<±1*10^{-9}	
Operating temperature °C	0 to +70	0 to +70	0 to +60	0 to +65	-40 to +60	-40 to +75°C
Frequency adjustment:						
– electronical	>±5*10^{-7}	>±3*10^{-7}	>±5*10^{-7}	>±7*10^{-8}	>±2*10^{-6}	
– mechanical						
Supply voltage V	+12	+12	+12	+12	+12	+15, +24, (+5 +12)
Current consumpt. operating 25°C mA	<200	<200	<200	<200	<200	
Current consumpt. warm up mA	<700	<700	<700	<700	<700	>700 mA for faster warm up
Output signal	sine/HCMOS	sine	sine	A/HCMOS	sine	sine/TTL/ACMOS/HCMOS
Spurious / Subharmonics attenuation dB	80	80	80	70	80	
Phase noise £(f) at 10 Hz/ 10 kHz $^{dBc}/_{Hz}$	-120/-150	-125/-150	-125/-160	-110/-140	-90/-140	
Pin out	A,B,C	A,B,C	A,B,C,D	A,B,C	A,B,C	oven-control option
Typically used crystal-cut	AT	AT/SC	SC	AT/BT	AT/BT	
Preferred frequency MHz	4.096 6.144 8.192 10.000	5.000 8.192	5.000 8.192 10.000	8.192 16.384 4 to 20	50 to 160	2MHz to 160 MHz

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