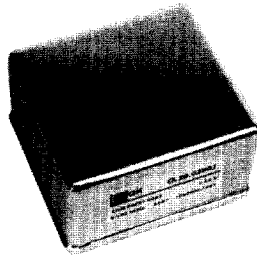


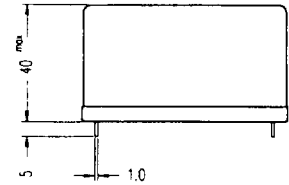
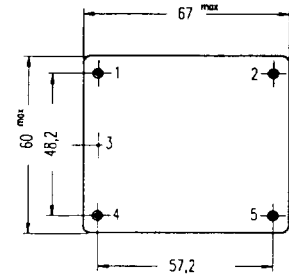
Ultra Stable OCXOs

Series 2000



FEATURES

- Frequency range 2 to 25 MHz
50 to 160 MHz
- Excellent temperature stability (-20 to +70°C) to $\leq \pm 1 \times 10^{-9}$
- Short term stability Allan variance to $\leq 3 \times 10^{-12}$
- 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	$<1 \times 10^{-8}$	$<5 \times 10^{-9}$	$<3 \times 10^{-8}$	$<1 \times 10^{-7}$	$<3 \times 10^{-7}$	
Short term stab.	Allan var. for Tau = 1 sec.	$<5 \times 10^{-11}$	$<5 \times 10^{-12}$	$<3 \times 10^{-12}$	$<5 \times 10^{-10}$	$<5 \times 10^{-11}$	
Frequency stability versus:							
-	operating temperature range	$<\pm 3 \times 10^{-9}$	$<\pm 1 \times 10^{-9}$	$<\pm 3 \times 10^{-9}$	$<\pm 5 \times 10^{-8}$	$<\pm 3 \times 10^{-8}$	
-	load variation +/- 5%	$<\pm 2 \times 10^{-10}$	$<\pm 5 \times 10^{-11}$	$<\pm 2 \times 10^{-10}$	$<\pm 1 \times 10^{-9}$	$<\pm 5 \times 10^{-9}$	
-	supply voltage variation +/- 5%	$<\pm 1 \times 10^{-10}$	$<\pm 1 \times 10^{-10}$	$<\pm 1 \times 10^{-10}$	$<\pm 2 \times 10^{-9}$	$<\pm 1 \times 10^{-9}$	
Operating temperature	°C	0 to +70	0 to +70	0 to +60	0 to +65	-40 to +60	-40 to +75°C
Frequency adjustment:							
-	electrical	$>\pm 5 \times 10^{-7}$	$>\pm 3 \times 10^{-7}$	$>\pm 5 \times 10^{-7}$	$>\pm 7 \times 10^{-8}$	$>\pm 2 \times 10^{-6}$	
-	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	$\mathcal{E}(f)$ 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		2MHz to 160 MHz