

OVEN CONTROLLED CRYSTAL OSCILLATORS (OCXO)

9100 Series

Main applications: Communications equipment, Measuring instruments etc.

- Features: 1. Excellent aging characteristics
 2. Wide frequency range (9168A Series)
 3. Anti-microphonic noise (9140A-BGE71, 9140A-CEE70)

Item	Measuring Condition	Model Spec. Code	9161A		9150A	9150B		9140A
			C		Q	B		C
			GQ00	FQ00	AA00	EE40	DE40	FA00
Standard Nominal Frequency (MHz)			10					25
Supply Voltage			+30VDC		+24VDC	+12VDC		
Power Consumption			45W ^{MAX}		8.5W ^{MAX}	5W ^{MAX}		1.4W ^{MAX}
Output Voltage			+10~-+12dBm		0~-+2dBm	1 Vrms ^{MIN}		0dBm ±1dB
Load			50 Ω			1kΩ		50 Ω
Operating Temp. Range			-55~85°C		0~50°C	-10~60°C		0~50°C
Operable Temp. Range			-62~95°C		-10~60°C	-20~70°C		-10~70°C
Frequency Stability	Short Term Stability	$\Delta f/f(2, \tau)$ 1sec	1×10^{-10}		5×10^{-11}	5×10^{-10}	1×10^{-10}	—
	Aging	After 24H(*1) or 48H(*2) or 240H(*3) operation	$\pm 1 \times 10^{-9}/\text{day}$ (*2)		$\pm 5 \times 10^{-9}/\text{day}$ (*2)	$\pm 2 \times 10^{-9}/\text{day}$ (*1)	$\pm 2 \times 10^{-9}/\text{day}$ (*1)	$\pm 5 \times 10^{-9}/\text{day}$ (*2)
			$\pm 5 \times 10^{-9}/\text{year}$ (*2)		$\pm 2 \times 10^{-9}/\text{year}$ (*2)	$\pm 1 \times 10^{-9}/\text{year}$ (*1)	$\pm 5 \times 10^{-9}/\text{year}$ (*1)	$\pm 5 \times 10^{-9}/\text{year}$ (*3)
	Temp. Charact.	Temp. Range	-55~85°C		0~50°C	-10~60°C		0~50°C
		Tolerance	$\pm 1 \times 10^{-7}$	$\pm 5 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 3 \times 10^{-8}$	$\pm 1 \times 10^{-8}$	$\pm 5 \times 10^{-8}$
	Supply Volt Change	Condition	+30V ±5%		+24V ±10%	+12V ±10%		±12V ±5%
		Specification	$\pm 5 \times 10^{-8}$	$\pm 3 \times 10^{-8}$	$\pm 1 \times 10^{-8}$	$\pm 2 \times 10^{-8}$	$\pm 5 \times 10^{-8}$	$\pm 2 \times 10^{-8}$
Vibration	Tot amp. 1.5 mm Freq. 10~55 Hz 3 planes/30 min each	$\pm 5 \times 10^{-8}$			$\pm 5 \times 10^{-8}$	$\pm 3 \times 10^{-8}$	$\pm 5 \times 10^{-8}$	
Shock	Natural Drop from 5 cm height, 3 planes/3 times each	$\pm 5 \times 10^{-8}$			$\pm 5 \times 10^{-8}$	$\pm 3 \times 10^{-8}$	$\pm 5 \times 10^{-8}$	
Frequency Trim Range	By Internal Trimmer	$\pm 3 \times 10^{-7}$ ^{MIN}			$\pm 1 \times 10^{-6}$ ^{MIN}			
Case Code		61A		50A	50B		40A-1	

(mm)

NO. 61A

NO. 50A

NO. 50B

NO. 40A-1

