XO5085 Series

1x1 inch, 12 Volt, Sinewave, OCXO

Ordering Information

XO5085A -XXX S R

- **Product Series**
- **Phase Noise Option**
  - **A:** Ultra Low Noise
  - **B:** Standard
- **Assigned Customer Specific**
- **Package Type**
  - **S:** Contact Factory for SMT option
  - **(Blank):** Through Hole

Features:

- Excellent phase noise performance
- RoHS Compliant

Applications:

- Microwave Radios
- Base Stations
- Test and Measurement Equipment
- Reference timing circuits

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency	F		100		MHz	
Frequency Stabilities						
Operating Temperature		0		+80	°C	Contact factory for other temperature range options.
Storage Temperature		-55		+85	°C	
vs Temperature	$\Delta F_T/F$	-100		100	ppb	Over the operating temperature range
vs. Supply Voltage	$\Delta F_{VDD}/F$	-30		+30	ppb	±5% change in voltage
Aging 10 Years		-1		+1	ppm	After 30-days Power On
Short Term Stability: ADEV			1×10^{-10}			Tau = 0.1 to 1.0 sec
RF Output						
Output Type			Sinewave			
Output Load			50		Ω	±10%
Level	V_{OH}		+9		dBm	
Tuning Voltage		0		10	V	Contact factory for other tuning range options.
Tuning Range			Sufficient for 10-years aging adjustment			
Modulation Bandwidth		1			kHz	3dB
Vref			+10		V_{DC}	≤ 0.5mA
Harmonics				-25	dBc	
Spurious				-75	dBc	
Other Parameters						
SSB Phase Noise (under static conditions)				**Option A** / **Option B**	dBc/Hz	
				-100 / -95		@ 10Hz Offset
				-132 / -127		@ 100Hz Offset
				-162 / -155		@ 1kHz Offset
				-170 / -163		@ 10kHz Offset
				-170 / -165		@ 100kHz Offset
G-sensitivity			1.5	3.0	ppb/g	
Warm-up Time				3	Minutes	@ 25°C, relative to 2-hrs after turn-on following 24-hrs off. To within ±0.1ppm of final frequency.
Supply Voltage & Power Consumption						
Supply Voltage	V_{DD}	11.4	12	12.6	V_{DC}	Contact factory for other supply voltage options.
Power Consumption				1.5	Watts	Steady state @ 25°C in still air
				3.6	Watts	@ warm-up

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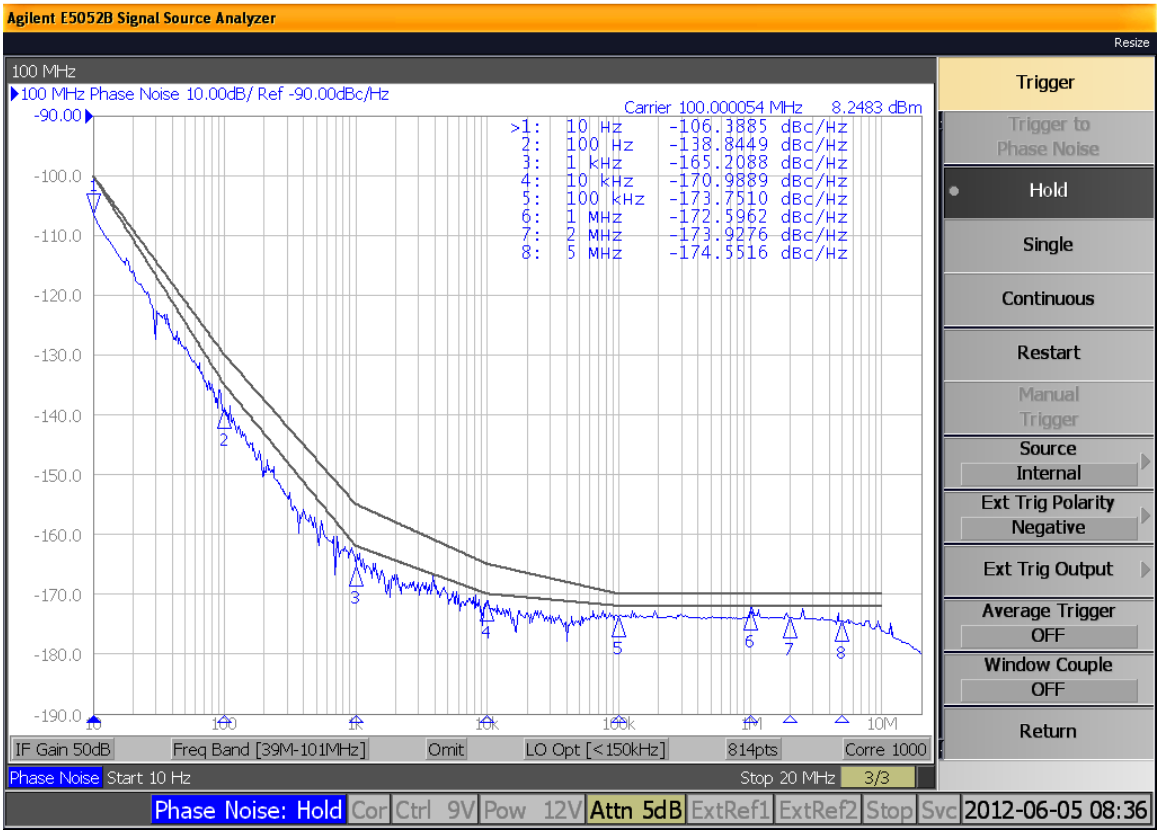
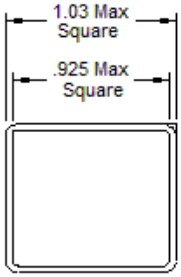
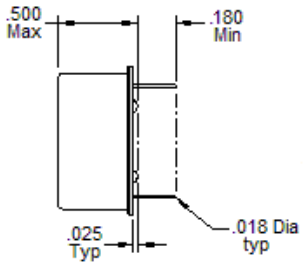
Phase Noise Plot:

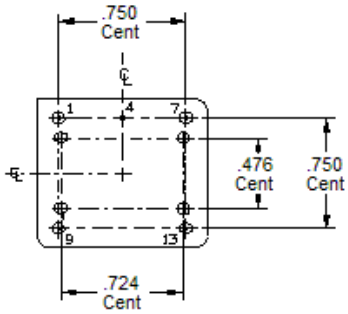


Mechanical Layout & Pin Information:

Pin Assignments
Pin 1: RF Output
Pin 4: Case Ground
Pin 7: VTune
Pin 13: VRef
Pin 19: Supply Voltage







** Please check website for environmental conditions and solder reflow profile.

Data Sheet Revision Table:

Date	Rev.	Author	Details of Revision
07-30-12	0	MM	Original Draft.

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