

XO5080 Series OCXO

Applications

PCS Base Stations
Cellular Base Stations
Digital Switching
Test Equipment
Synthesizers
LMDS/MMDS
ESMR/SMR



Features

Compact Design
High Stability
SC-cut or AT-cut
Low Phase Noise
Fast Warm Up
Surface Mount

Typical Specifications

Model	Frequency (MHz)	Temperature Range (°C)	Temperature Stability	Aging First Year	Output	Supply Voltage
XO5080						
SC-cut	10	0 to +70	$\pm 1 \times 10^{-8}$	$\pm 5.0 \times 10^{-8}$	Sine wave/HCMOS	5 Vdc $\pm 5\%$
AT-cut	10	0 to +70	$\pm 5.0 \times 10^{-8}$	$\pm 2 \times 10^{-7}$	Sine wave/HCMOS	5 Vdc $\pm 5\%$
Options	3 to 100	-55 to +85	Consult Factory		HCMOS	5-15 V

Additional Specifications

Aging daily $< \pm 5 \times 10^{-10}$ for SC-cut $\pm 1 \times 10^{-9}$ for AT-cut
Power consumption 1.25 watt @ 25 °C steady state
Warm-up power 4.0 watt
Warm-up time @ 25 °C To within $\pm 1 \times 10^{-7}$ of Fo in 2 min

Frequency Adjustment $\pm 2 \times 10^{-6}$ SC $\pm 4 \times 10^{-6}$ AT
Voltage control range 0 to 4 V
Slope Positive
Reference output 3.9 V

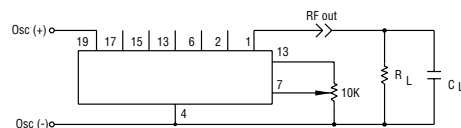
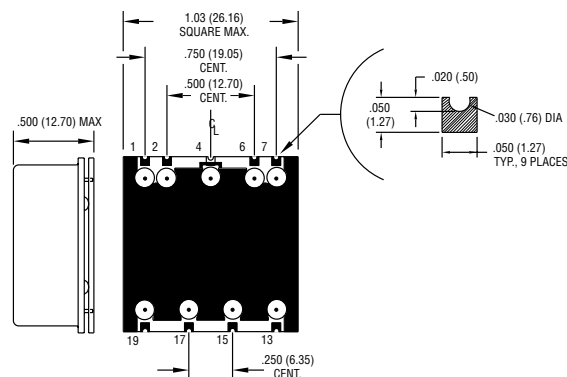
Optional Models

	Xtal	Output
5081	AT	Sine
5082	AT	HCMOS
5083	SC	Sine
5084	SC	HCMOS

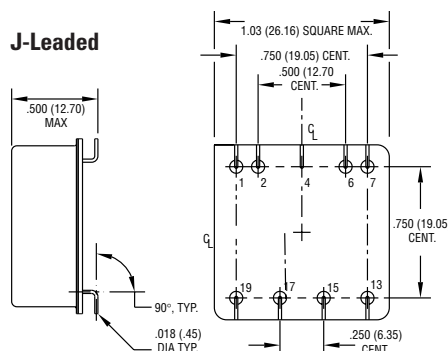
Phase Noise

	(SC-cut)	(AT-cut)
1 Hz	-90 dBc/Hz	-80 dBc/Hz
10 Hz	-120 dBc/Hz	-115 dBc/Hz
100 Hz	-140 dBc/Hz	-140 dBc/Hz
1 kHz	-145 dBc/Hz	-145 dBc/Hz
10 kHz	-145 dBc/Hz	-145 dBc/Hz

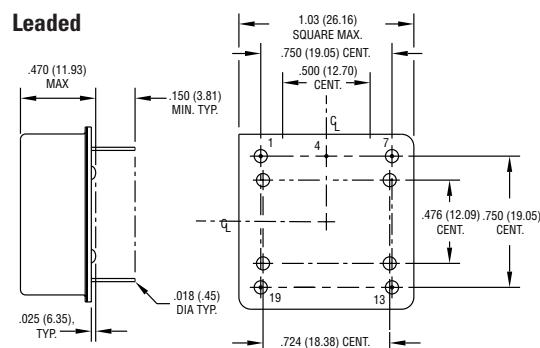
Surface Mount



J-Leaded



Leaded



Dimensions are in inches (mm)

PIN CONNECTIONS
1. RF OUTPUT
2. N/C
4. CASE GROUND & SUPPLY RETURN
6. N/C
7. FREQUENCY ADJUST OR Vref
13. Vref (OPTIONAL)
15. N/C
17. OVEN READY (OPTIONAL)
19. SUPPLY (+)

Pin numbers shown for ref. only.
Numbers are not marked on unit.

Specifications are subject to change without notice.

Visit our web site at <http://www.piezotech.com>

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