MXO5019 Series
2x2 in., 12.0 Volt, CMOS/Sinewave, OCXO

- **Available in AT or SC cut, featuring low phase noise and voltage control**
- **Ideal for PCS & cellular base stations and medical instrumentation**

Ordering Information

	MXO5019	1	S	A	C	D	00.0000 MHz

Product Series

Temperature Range

1:	0°C to +70°C	**6:**	-20°C to +70°C
8:	0°C to +50°C	**B:**	-30°C to +70°C
C:	-40°C to +70°C		

Stability

A:	$\pm 1.0 \times 10^{-7}$	**E:**	$\pm 5.0 \times 10^{-8}$
G:	$\pm 3.0 \times 10^{-8}$	**K:**	$\pm 1.0 \times 10^{-8}$
M:	$\pm 7.0 \times 10^{-9}$	**P:**	$\pm 5.0 \times 10^{-9}$
R:	$\pm 3.0 \times 10^{-9}$	**S:**	$\pm 2.0 \times 10^{-9}$

Crystal Cut

A:	AT Cut	**S:**	SC Cut

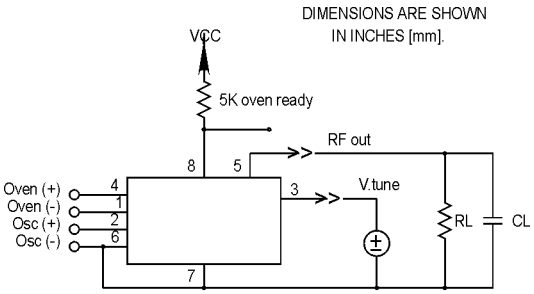
Output Type

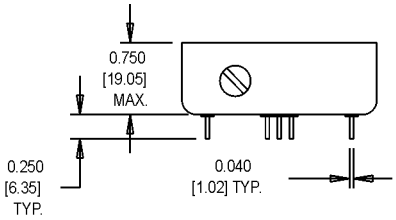
C:	CMOS	**S:**	Sinewave

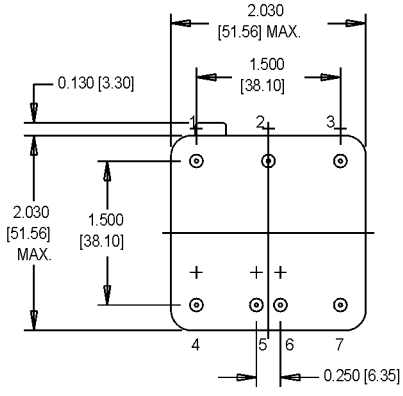
Package Type

D: DIP

Frequency (Customer Specified)







Pin Connections

PIN	FUNCTION
1	Oven Supply Return
2	Oscillator Supply (+)
3	Frequency Adjust
4	Oven Supply (+)
5	RF Output
6	RF Ground & Osc. Supply Return
7	Case Ground
8	Oven Ready (Optional)

M-tron Industries, Inc., PO Box 630, Yankton, SD 57078-0630, USA Phone: 605-665-9321 or 1-800-762-8800 Fax: 605-665-1709 Website: www.mtron.com
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MXO5019 Series
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Electrical Specifications	PARAMETER	SC-cut	AT-cut
	Frequency Range	10 MHz	
	Temperature Range	-20°C to +70°C	
	Temperature Stability	±1.0 x 10^{-8}	±5.0 x 10^{-8}
	Supply Voltage	+15 Vdc oven (+12 Vdc osc)	+15 Vdc oven (+12 Vdc osc)
	Aging Over 1 Year	±1.5 x 10^{-7}	±2.0 x 10^{-7}
	Aging Per Day	±5.0 x 10^{-10}	
	Turn On	600 mA max	
	Current	300 mA max @ 25°C steady state	
	Warm-up Time @ 25°C	To within ±0.10 ppm of Fo in 2.5 min, ±0.01 ppm in 5 min	
	Load Stability	±1.0 x 10^{-9}	
	Aging Adjustment	External 10 k pot/voltage	
	Voltage Range	0.5 V to 10 V	
	Deviation	±3.0 x 10^{-7}	
	Slope	Positive	
	Phase Noise		
	1 Hz	-90 dBc/Hz	-75 dBc/Hz
	10 Hz	-120 dBc/Hz	-110 dBc/Hz
	100 Hz	-145 dBc/Hz	-140 dBc/Hz
	1 kHz	-155 dBc/Hz	-155 dBc/Hz
	10 kHz	-160 dBc/Hz	-160 dBc/Hz
	Sinewave Version		
	Spurious	-75 dBc max	
	Harmonics	-20 dBc max	
	Load	50 Ω to 3 k Ω	
	Output Level	+7 dBm min into 50 Ω	
	HCMOS Version		
	Duty Cycle	40/60	
	Load	2 Gates	

T \ S	A	E	G	K	M	P	R	S
1	C	C	A	C	C	C	S	N
6	C	A	C	S	N	N	N	N
8	C	C	C	A	C	C	C	S
B	C	A	C	C	C	S	N	N
C	A	C	C	C	S	N	N	N

A = AT Cut
S = SC Cut
C = Consult Factory
N = Not Available

OCXO

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