

OCXO 36.1 X 27.2 X 13mm "EURO" PACKAGE
FEATURES:

- AT/SC cut
- Low aging, Compact Package
- APPLICATIONS: PCS Base Station, Cellular Base Station, Synthesizer, Digital Switching Measurement Equipment


■ SPECIFICATION

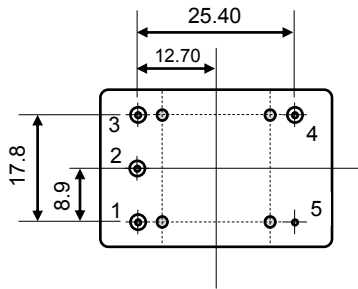
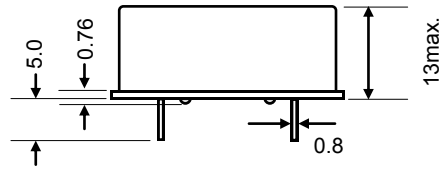
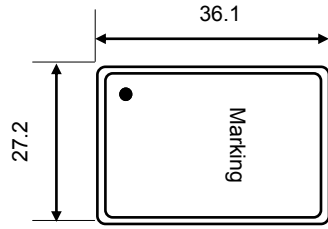
FREQUENCY RANGE		2 ~ 100MHz (higher frequency available)	
STANDARD FREQUENCIES		10MHz, 12.8MHz, 20MHz, 38.88MHz, 100MHz	
FREQUENCY TOLERANCE		±0.2ppm (center control voltage)	
FREQ. STABILITY	Vs. OPERATING TEMPERATURE	See Table 1	
	Vs. LOAD (±10%)	±1ppb (10MHz SC cut)	
	Vs. SUPPLY VOLTAGE (±5%)	±1ppb (10MHz SC cut)	
SHORT TERM STABILITY		1X10 ⁻¹¹ /s (10MHz SC cut)	
STORAGE TEMPERATURE RANGE		-40°C ~ +100°C	
SUPPLY VOLTAGE		+3.3V _{DC} , +5.0V _{DC} , +12.0V _{DC}	
SUPPLY CURRENT		4.0W max. during warm-up, 1.2W max. when static	
WARM-UP TIME	AT Cut	±0.2ppm, 3minutes max.	
	SC Cut	±0.1ppm, 3minutes max.	
OUTPUT	LOGIC FAMILY	Sine Wave	HCMOS/LVCMOS
	LOAD	50Ω	15pF typ., 50pF max. available
	LEVEL	5dBm min.	"1" level: 90%V _{DD} min.; "0" level: 10%V _{DD} max.
	HARMONIC	-30dB max.	-
	NOISE SUPPRESSION	-75dB max.	-
	SYMMETRY (DUTY CYCLE)	-	45/55%
	RISE/FALL TIME	-	6ns max.(fn<40MHz), 3ns max.(fn>40MHz)
FREQUENCY DEVIATION	AT Cut	±3.0ppm	
	SC Cut	±0.7ppm	
CONTROL VOLTAGE	3.3V	0~3.3V	
	5.0V, 12V	0~5.0V	
SLOPE		Positive	
LINEARITY		±10%	
AGING	DAY	AT Cut	±2ppb
		SC Cut	±1ppb
	YEAR	AT Cut	±200ppb
		SC Cut	±100ppb
	10 YEAR	AT Cut	±2.0ppm
		SC Cut	±0.5ppm
PHASE NOISE	10Hz	-120dBc/Hz	
	100Hz	-140dBc/Hz	
	1kHz	-145dBc/Hz	
	10kHz	-150dBc/Hz	

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■ **TABLE 1** **FREQUENCY STABILITY VS TEMPERATURE**

Frequency Stability vs Temperature		Temperature Range
AT CUT	SC CUT	
±50ppb	±2ppb	0°C ~ +50°C
±75ppb	±10ppb	-20°C ~ +70°C
±100ppb	±10ppb	-40°C ~ +75°C

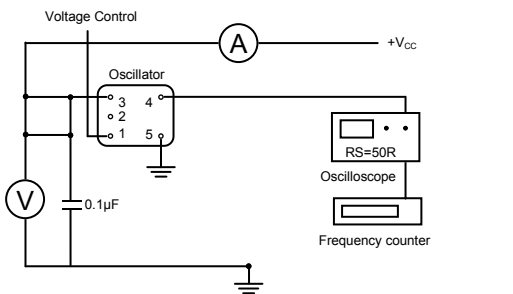
■ **PACKAGE DIMENSIONS**



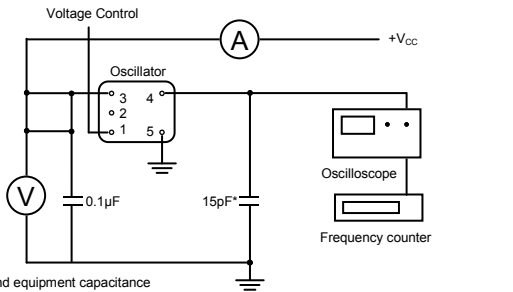
Pin Configuration	
1	V _C or N/C
2	Ref. V or N/C
3	V _{DC}
4	RF Output
5	GND

■ **TEST CIRCUIT**

Sine Wave



CMOS



* inclusive of jig and equipment capacitance

■ **PART NUMBERING GUIDE**

OX-E - 5 - E5 - J - R - 10.000M

Voltage

3: +3.3 V
5: +5.0 V
12: +12.0 V

Frequency

Frequency in MHz

Output

Q: Sine Wave
R: CMOS/LVCMOS

Stability

F2: ±0.002ppm
F5: ±0.005ppm
E1: ± 0.01ppm
E5: ± 0.05ppm
01: ± 0.1ppm
03: ± 0.3ppm
05: ± 0.5ppm
Other options available

Operating Temperature

H: 0°C to 50°C
I: -10°C to 60°C
J: -10°C to 70°C
K: -20°C to 70°C
L: -30°C to 70°C
M: -40°C to 75°C
Other options available

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