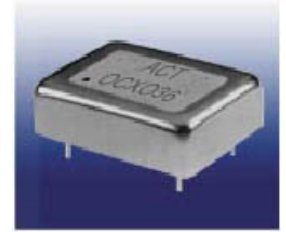


FEATURES

- Stability up to ± 0.01 PPM
- Low Aging
- Voltage Controlled Frequency Adjustment
- Measurement Equipment

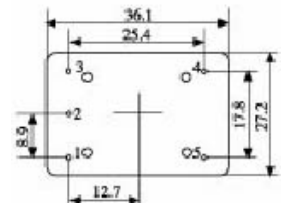
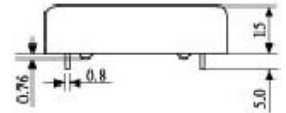
APPLICATIONS

- PCS / Cellular Base Station
- Digital Switching
- Synthesizer
- SC Cut – Please enquire



SPECIFICATIONS

Frequency Range	1.0 ~ 100MHz
Frequency Accuracy (Adjustment 25°C)	± 0.5 PPM (Centre control voltage)
Frequency Stability vs Temperature	See Table 1
Aging (AT Cut)	± 0.001 PPM/day, first year ± 0.1 PPM, 10 years ± 1 PPM
(SC Cut)	± 0.001 PPM/day, first year ± 0.1 PPM, 10 years ± 1 PPM
Output Type and Load Characteristics	See Table 2
Frequency Stability vs Load	± 0.02 PPM vs $\pm 10\%$ load change
Supply Voltage	+5.0VDC, +12.0VDC (3V3 – Custom option)
Frequency Stability vs Voltage	± 0.02 PPM vs $\pm 5\%$ voltage change
Supply Consumption	3.6W (max.) warm-up; 1.2W (max.) static
Warm-up Time (AT Cut)	± 0.2 PPM, <1 min.
(SC Cut)	± 0.05 PPM, <1 min.
Adjustable Frequency	AT Cut ± 7.0 PPM
Control Voltage Range	0~5V
Slope	Positive
Linearity	$\pm 10\%$
Phase Noise (10MHz)	1Hz, -80dBc/Hz, 10Hz, -120dBc/Hz 100Hz, -140dBc/Hz, 1kHz, -145dBc/Hz, 10kHz, -150dBc/Hz
Storage Temperature Range	-40 ~ +100°C



(Unit: mm)

PIN FUNCTION:

PIN1 – Control Voltage

PIN2 – Reference Voltage/NC

PIN3 – Power Supply

PIN4 – Output

PIN5 – GND

Compatible with Eu Directive
2002/EC - RoHS

FREQUENCY STABILITY vs TEMPERATURE – TABLE 1

(Applies to frequencies < 20MHz & to 12v0 supply. For frequencies > 20MHz & 3v3 & 5v0 Stabilities will be lower –Please enquire)

Frequency Stability vs Temperature	Temperature Range
± 0.01 PPM (AT Cut)	0 - +50°C
± 0.03 PPM (AT Cut)	-20 - +70°C
± 0.05 PPM (AT Cut)	-40 - +75°C

OUTPUT TYPE AND LOAD CHARACTERISTICS – TABLE 2

Output Waveform	Frequency Range	Oscillation State	Output Characteristics
Clipped Sine Wave	8MHz - 30MHz 10MHz - 100MHz	F: Fundamental O: Overtone	Load: 10k Ω /10pF Output level: >1Vp-p
TTL	1MHz - 30MHz 10MHz - 100MHz	F: Fundamental O: Overtone	Load: Max. 10 low power consumption TTL gates “1” level: >+2.4VDC; “0” level: <+0.2VDC Duty cycle: 45/55 Rise/fall time: <6ns
HCMOS	1MHz - 30MHz 10MHz - 100MHz	F: Fundamental O: Overtone	Load: Max. 10 low power consumption TTL/HCMOS “1” level: >+4.3VDC; “0” level: <+0.5VDC Duty cycle: 45/55 Rise/fall time: <6ns
ACMOS	1MHz - 30MHz 10MHz - 100MHz	F: Fundamental O: Overtone	Load: Max. 10 low power consumption TTL/ACMOS “1” level: >+4.3VDC; “0” level: <+0.5VDC Duty cycle: 45/55 Rise/fall time: <6ns
Sine Wave	8MHz - 30MHz 10MHz - 100MHz	F: Fundamental O: Overtone	Load: Nominal value 50 Ω Output level: >2dBm Harmonic Attenuation: >-25dB Noise Attenuation: >-75dB

Please note that all parameters cannot necessarily be specified in one device.

Customer to specify : Frequency, Output, Voltage, Stability, and Operating Temperature

In line with our ongoing policy of product improvement and evolution the above specification may be subject to change without notice

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