Oven Controlled Crystal Oscillator (OCXO)

(SMD Type, DIP Type)

SPECIFICATION

MODEL		ASCX
Frequency Range		1.000 ~ 100.000 MHz
Frequency Accuracy		Center control voltage: ±0.1 ppm
Frequency Stability vs. Temperature		See Table 1
Aging	AT Cut	±0.003ppm/day, ±0.5ppm/first year, ±3ppm/10 years
	SC Cut	±0.003ppm/day, ±0.1ppm/first year, ±0.5ppm/10 years
Output and Load Characteristics		See Table 2
Supply Voltage		+3.3VDC, +5VDC, +12VDC
Frequency Stability vs. Load		±0.02ppm vs. ±10% / Load change
Frequency Stability vs. Voltage		±0.02ppm vs. ±5% / Voltage change
Supply Consumption		3.6W (Max.) when warm-up
Warm-up Time		1.2W (Max.) when static ±0.5ppm < 3 minutes (AT) ±0.03ppm < 3 minutes (SC)
Adjustable Frequency Range		AT: ±5.0ppm, SC: ±1.0ppm
Slope		Positive
Linearity		±10%
Control Voltage Range		0 ~ 5V
Phase Noise (10MHz)		1Hz, -80dBc/Hz 10Hz, -120dBc/Hz 100Hz, -140dBc/Hz 1KHz, -145dBc/Hz 10KHz, -150dBc/Hz
Storage Temperature Range		-40 ~ +100°C

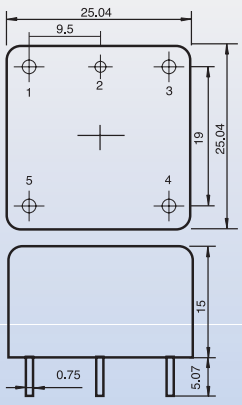
Table 1: Frequency Stability vs. Temperature

Code	Frequency Stability vs. Temperature	Temperature Range
A	±0.1ppm (At Cut)	0 ~ +50°C
B	±0.05ppm (SC Cut)	
C	±0.2ppm (At Cut)	-20 ~ +70°C
D	±0.1ppm (SC Cut)	
E	±0.5ppm (At Cut)	-30 ~ +75°C
F	±0.3ppm (SC Cut)	

Table 2: Output and Load Characteristics

Output Waveform	Output Type Code	Frequency Range	Oscillation State	Output Characterisitcs
Clipping Sine Wave	0	8.00~30.00MHz 10.00~100.00MHz	F: Fundamental O: Overtone	Load:10KΩ//10PF Output Level: >1Vp-p
TTL	1	1.00~30.00MHz 10.00~100.00MHz	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	2	1.00~30.00MHz 10.00~100.00MHz	F: Fundamental O: Overtone	(Load: Max 10 Low power consumption TTL gates) "1" Level:>+4.5VDC "0" Level: <+0.5VDC Duty Cycle: 45/55 Rise/Fall time: <6ns
ACMOS	3	1.00~30.00MHz 10.00~100.00MHz	F: Fundamental O: Overtone	(Load: Max 10 Low power consumption TTL gates) "1" Level:>+4.5VDC "0" Level: <+0.5VDC Duty Cycle: 45/55 Rise/Fall time: <6ns

DIMENSION (mm)



PIN	FUNCTION
1	Output
2	GND
3	Vcon/NC
4	Refe. Voltage
5	Power Supply