



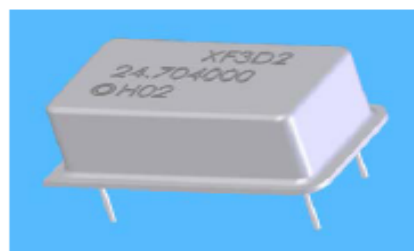
We are committed to the supply of all types of substrate wafers to the microelectronics industry

XF Type Crystal Oscillator

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Features

- CMOS/TTL Compatible Clock Oscillator.
- XF typical 20.4x12.8x7.0mm standard footprint.
- Resistance welding for hermetical seal.
- High stability and Long-term stability
- **Lead Free and RoHS compliant**



ORDERING GUIDANCE

Product Series	Supply Voltage (V)	Frequency Stability (ppm)	Operating Temp. Range (°C)	—	Frequency (MHz)
Code: Meaning	Code: Meaning	Code: Meaning	Code: Meaning	Dash	
XF: DIP14 CMOS/TTL XO	1: 1.8 2: 2.5 3: 3.3 5: 5.0	A: ±25 B: ±50 C: ±100 D: ±20 E: ±10 G: ±15 H: ±30	1: 0~+70 2: -40~+85 3: 0~+85 4: -20~+70 5: -10~+85 6: -10~+70 7: -10~+80 8: 0~+60		XXX.XXXXXX
Ordering example: XF3B2-26.000M DIP14 CMOS/TTL XO, 3.3V, ±50ppm, -40°C~85°C, 26.000MHz					
Note: If there're any other particular requirements, they should be specified in customers' order.					

Electrical Specification

Parameter	Min				Max				Unit
Supply Voltage (V_{DD})±10%	1.62	2.25	2.97	4.5	1.98	2.75	3.63	5.5	V
Frequency Range	0.5				135	135	135	110	MHz
Frequency Stability	Refer to Ordering Guidance (Overall condition inclusive of calibration @ 25 °C , operating temperature change, V_{DD} variation, load variation, aging, etc.)								ppm
Operating Temperature Range	Refer to Ordering Guidance								°C
Supply Current									mA
0.5MHz =<Fo<10MHz	-				3	3	5	7	
10MHz =<Fo<20MHz	-				10	15	20	30	
20MHz =<Fo<50MHz	-				15	20	25	40	
50MHz =<Fo<80MHz	-				20	25	40	60	
80MHz =<Fo<135MHz	-				20	25	40	60	
Duty Cycle (CMOS)	45				55				%
Output High (Voh)	0.9 V_{DD}				-				V
Output Low (Vol)	-				0.1 V_{DD}				V
Rise Time/Fall Time (tr/ft)	Measured between 10% to 90% of V_{DD} with output load of 15pF								ns
0.5MHz =<Fo<5MHz	-				10	8	6	5	
5MHz =<Fo<20MHz	-				8	6	5	4	
20MHz =<Fo<50MHz	-				6	5	5	4	
50MHz =<Fo<80MHz	-				5	5	4	3	
80MHz =<Fo<135MHz	-				5	4	3	2	
Output Load(Fan-out) (CMOS)	15				15	15	30	50	pF
Tristate Function(Input to Pin1)									V
Output Enable	1.26	1.75	2.0	4.0	(With Pin1 floating, Output enabled)				
Output Disable(Hi-Z)	-				0.5	0.5	0.5	0.8	
Standby Current	-				10				μA
Start Time	-				10				ms
Phase Jitter(RMS, 12KHz to 20MHz)	-				1				ps
Storage Temperature	-55				125				°C

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