

Quartz Crystal Oscillator

CMOS Compatible Output with Enable/Disable

AEL 1612 1.6mm x 1.2mm Worlds Smallest Crystal Oscillator



Static sensitive device

Current part - Recommended for new designs

Specification Key

X07A-1612 - 16.00 - 18 - B R2 - G T1

Base Code

Frequency Range

1.0000 MHz to 80.000 MHz	In MHz
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Supply Voltage (V)

1.8 ±0.18	18
2.5 ±0.25	25
3.3 ±0.33	33

Frequency Tolerance (PPM)

±7	A
±10	B
±15	C
±20	D
±30	E
±50	F
Other	N

OTR °C

-20 to +70
-30 to +85
-40 to +85
Other

Operating Stability over Temperature

±10PPM	±15PPM	±20PPM	±30PPM	±50PPM
P1	P2	P3	P4	P5
Q1	Q2	Q3	Q4	Q5
R2	R3	R4	R5	
XX				

Reel Qty

3000pcs/Reel	T3
1000pcs/Reel	T1
Other Option	XX

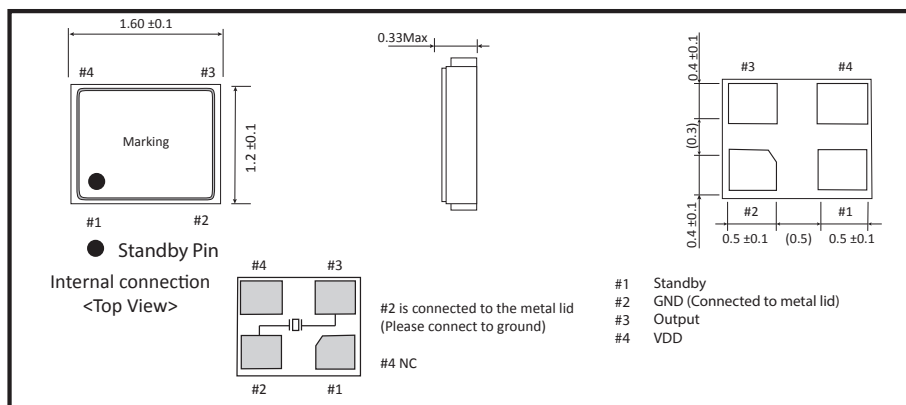
Storage Temp. (°C)

-40 to +85	G
-40 to +105	H
Other	XX

Item	Specification	Note
Current (mA)	2.0 Max	F=40MHz VD=3.0V No Load
Standby Current (µA)	10 Max	Standby By = L
Output Voltage (VOH)	V _{DD} -0.4 Min	IOH = -4mA
Output Voltage (VOL)	0.4 Max	IOL = +4mA
Output Load (pF)	15 Max	
Output Waveform	CMOS	
Duty Cycle	50 ±5	
Rise/Fall Time (ns)	4.5 Max	10% V _{DD} - 90% V _{DD}

Item	Specification	Note
Startup Time (ms)	2.0 Max	VDD = 3.3V
	5.0 Max	VDD = 1.8V
Random Jitter (ps)	2.9 Typ	VDD = 3.3V
Total Jitter (ps)	40 Typ	VDD = 3.3 V
Phase Jitter (ps)	1.0 Max	VDD = 3.3V**
Standby Pin 1	High	0.7 VDD Min Output Enable
	Low	0.3 VDD Max Output Disable

Dimensions (mm)



Recommended Solder Pattern

