

# SMD Crystal Oscillators

## CMOS Output

### 3.2x2.5x1.0mm AO32 Series



#### Features

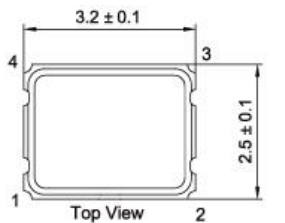
- Ultra small SMD seam sealed clock crystal oscillator units.
- High precision characteristic covering up to high frequency range.
- Designed for automatic mounting and reflow soldering.
- Tri-State function available.
- Supply voltage range : 1.8 V~3.3 V.
- High stability, low jitter , low power consumption.
- RoHS Compliant / Pb Free.



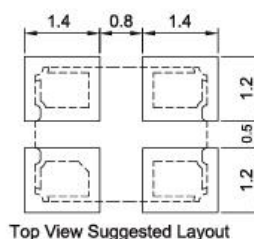
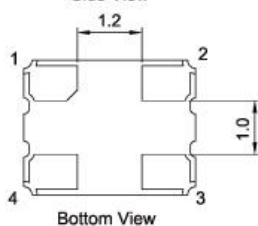
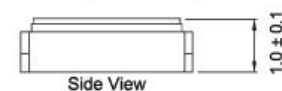
#### Crystals specifications

ITEMS/TYPE	AO32
Frequency Range	1~54MHz
Output Type	CMOS
Output Load	15 pF , or specify
Oscillation Mode	Fundamental
Supply Voltage	1.8V~3.3V, or specify
Frequency Stability	± 20 ppm , or specify
Operating Temperature Range	-40~+85 °C , or specify
Storage Temperature Range	-55~+125 °C
Voltage Vol ( Max. )/Voltage Voh ( Min. )	VOH=90%Vdd / VOL+10%Vdd
Rise ( Tr ) / Fall ( Tf ) Time	5 ns Max.
Current Consumption	10 mA Max.
Symmetry	45~ 55%
Start-up Time	5 ms Max.
Phase Jitter ( 12 KHz ~ 20 MHz )	1 ps Max.
Aging ( at 25°C )	± 3 ppm / year Max.
Packing Unit	3000pcs/Reel

#### Dimensions and patterns(unit:mm)



PAD FUNCTION:  
 1: ENABLE CONTROL  
 2: GND  
 3: OUT  
 4: VDD



Units: mm