

# SMD Crystal Oscillators- CMOS Output 2.0 x 1.6 x 0.75 mm 8N Series



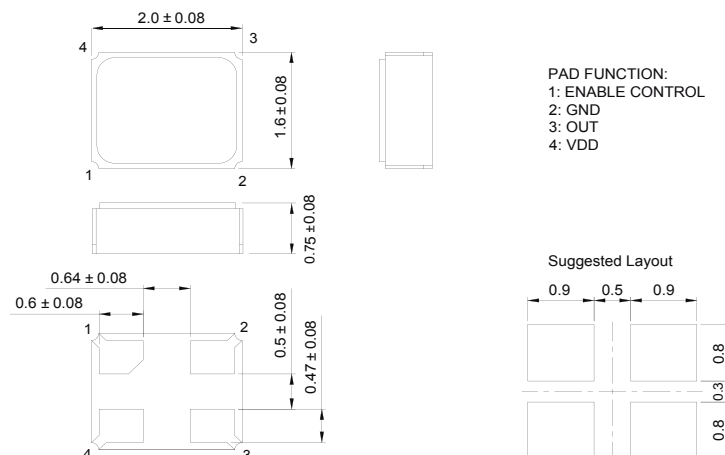
## Features

- Extremely small SMD seam sealed clock oscillator unit.
- Application for smart phone, sip module, variety of compact portable consumer products.
- Tri-state function available.
- High reliable environmental performance.
- RoHS Compliant / Pb Free.

## Electrical Specifications

Item / Type	8N
Output Type	CMOS
Output Load	15 pF , or specify
Oscillation Mode	Fundamental
Supply Voltage	3.3 V ( 1.8 V , 2.5 V available )
Frequency Range	4 ~ 54 MHz
Frequency Stability	± 25 ppm , ± 50 ppm
Operating Temperature Range	- 20 ~ + 70 °C , or specify
Storage Temperature Range	- 55 ~ + 125 °C
Voltage Vol ( Max. ) / Voh ( Min. )	0.1 VDD / 0.9 VDD
Rise ( Tr ) / Fall ( Tf ) Time	5 ns Max.
Supply Current	5 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.

## Dimensions



Units: mm