



## Oscillators

### 3.2×2.5mm SMD SEAM SEALED OSCILLATOR / SERIES

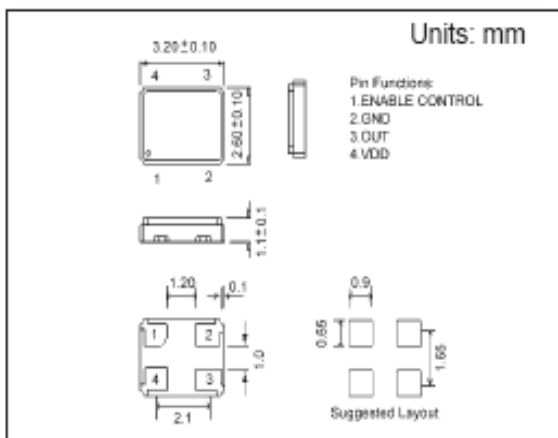
#### ■ Features

- ◎ Ultra Small SMD type clock crystal oscillator units.
- ◎ High precision characteristic covering up to high frequency range.
- ◎ Designed for automatic mounting and reflow soldering.
- ◎ Optionable stand-by function for output: Tri-state output.
- ◎ Supply voltage range: 1.8V ~ 5V.
- ◎ High stability, low jitter, low power consumption.
- ◎ Main application: wireless communication, PDA, and DSC.
- ◎ Lead free parts.

#### ■ Electrical Specifications

Item	type	X7		
Output Load (CMOS)		15PF	15PF, 30PF	15PF, 50PF
Supply Voltage		1.8V	2.5V, 2.8V, 3.3V	5V
Frequency Range		1.5~120MHz		
Frequency Stability		±25ppm, ±50ppm		
Operating Temperature Range		-20 ~ +70°C, -40 ~ +85°C		
Storage Temperature Range		-55 ~ +125°C		
Voltage Vol (Max.) / Voh (Min.)		0.1VDD / 0.9VDD		
Rise (Tr Max.) / Fall (Tf Max.) Time		10ns Max		
Supply Current		20m A Max	30m A Max	45m A Max
symmetry		40 ~ 60%		
Start-up Time		10 ms Max		
Phase Jitter (12KHz ~ 20KHz)		10ps Max		
Aging (25°C)		±3ppm / year Max.		

#### ■ Dimensions



#### ■ Reflow Condition

