

# PROGRAMMABLE CRYSTAL OSCILLATOR

## SPO-7050B New Product

### Applications

- Any frequency

### Features

- One time programmable
- PLL circuit provides wide frequency range application (1-200MHz)
- Low power consumption design
- Low jitter design with new developed IC
- High frequency capable device

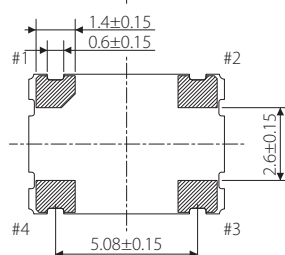
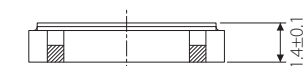
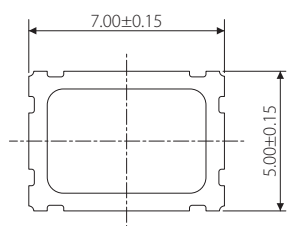
### Specifications



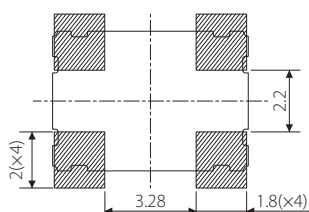
| Model                       | SPO-7050B                                                                    |
|-----------------------------|------------------------------------------------------------------------------|
| Nominal Frequency range     | 1MHz to 110MHz / 1.8V, 1MHz to 166MHz / 2.5V, 1MHz to 200MHz / 3.3V          |
| Storage temperature range   | -55 to +125 °C                                                               |
| Operating temperature range | -40 to +85 °C                                                                |
| Frequency stability         | $\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$ , $\pm 100 \times 10^{-6}$ |
| Power supply voltage (Vdd)  | +1.8V DC $\pm 10\%$ ~ +3.3V DC $\pm 10\%$                                    |
| Current consumption         | 30mA max                                                                     |
| Output level                | C-MOS                                                                        |
| Load                        | 15pF                                                                         |
| Output voltage level        | V <sub>OL</sub> : 10%Vdd max. / V <sub>OH</sub> : 90%Vdd min.                |
| Rise & Fall time            | 5ns max. / 10%Vdd - 90%Vdd                                                   |
| Duty cycle                  | 45 to 55% / 2.5 to 3.3V 40 to 60% / 1.8V at 1/2Vdd                           |
| Jitter (1sigma)             | 100ps max.                                                                   |
| Tri-state Function          | #1: Floating, or "H"→Output enable / #1: "L"→Output disable(Hi-Z)            |

Package quantity: 1,000pcs max./Reel.

### Outline and Dimensions [unit:mm]



Example of a Terminal Land Pattern



| Terminal | Connection       |
|----------|------------------|
| #1       | Tri-state or N.C |
| #2       | GND              |
| #3       | OUTPUT           |
| #4       | Vdd              |

Tri-state Function

| Tri-state Pin    | Output       |
|------------------|--------------|
| High or Floating | Active       |
| Low              | Hi-Impedance |