

## ■ FEATURES:

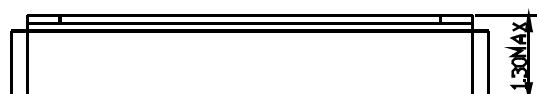
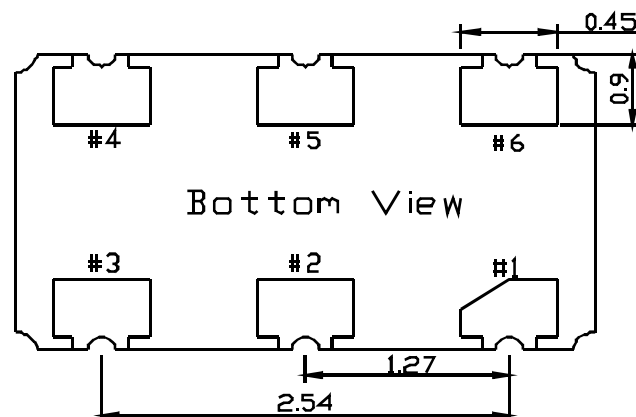
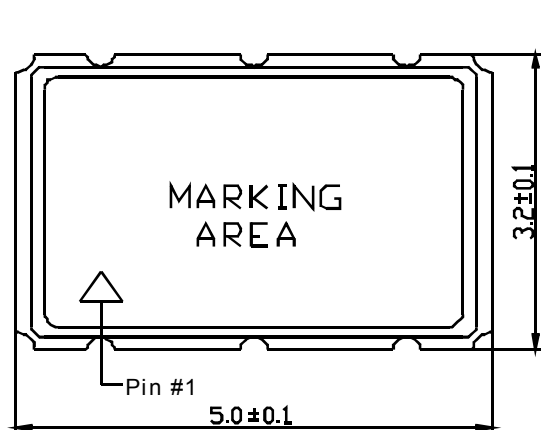
- Miniature Package
- Low cost and high stability
- Industry Standard
- TTL/HCMOS Output Compatible

## ■ SPECIFICATION:

| Parameter                                               | Min                    | Typical | Max                                           | Unit |
|---------------------------------------------------------|------------------------|---------|-----------------------------------------------|------|
| Package                                                 | SMD5032                |         |                                               |      |
| Frequency Range(F0)                                     | 1.50                   |         | 54.00                                         | MHz  |
| Frequency Tolerance @25±3 °C ( $\Delta F/F0$ )          | ±20                    | F0      | ±50                                           | PPM  |
| Frequency Stability @T <sup>OPR</sup> ( $\Delta F/F0$ ) | ±20                    | F0      | ±50                                           | PPM  |
| Operating Temperature Range(T <sup>OPR</sup> )          | -40                    |         | +85                                           | °C   |
| Storage Temperature Range(T <sup>STG</sup> )            | -55                    |         | +125                                          | °C   |
| Operating Voltage(Vcc)                                  | 5.0±10% or 3.3±10%     |         |                                               | V    |
| Control Voltage Range(V control)                        | 2.50±2.45 or 1.65±1.60 |         |                                               | V    |
| Pull ability@Control Voltage Range                      | ±50                    |         | ±150                                          | PPM  |
| Input Current On Load(Icc)                              |                        |         | 40(1.50 to 23.99MHz)<br>60(24.00 to 54.00MHz) | mA   |
| Duty Cycle( $\eta$ )                                    | 45                     | 50      | 55                                            | %    |
| Rise Time (Tr)                                          |                        |         | 10(1.50 to 23.99MHz)<br>8(24.00 to 54.00MHz)  | ns   |
| Fall Time (Tf)                                          |                        |         | 10(1.50 to 23.99MHz)<br>8(24.00 to 54.00MHz)  | ns   |
| Output Load                                             | 15PFHCMOS Typ          |         |                                               |      |
| Output Low Voltage Level("0")                           |                        |         | 10%V <sup>CC</sup>                            | V    |
| Output High Voltage Level("1")                          | 90 %V <sup>CC</sup>    |         |                                               | V    |



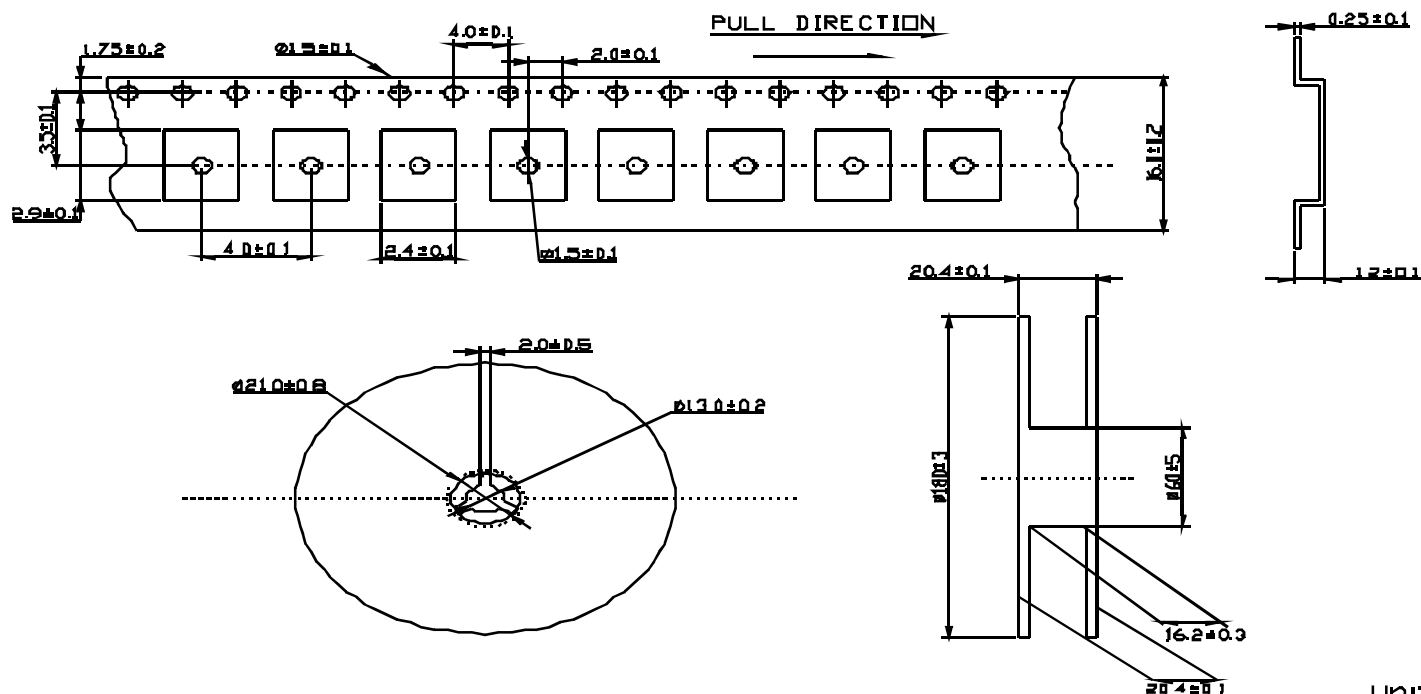
### ■ DIMENSIONS AND PIN FUNCTION:



Package Drawing  
Unit:mm

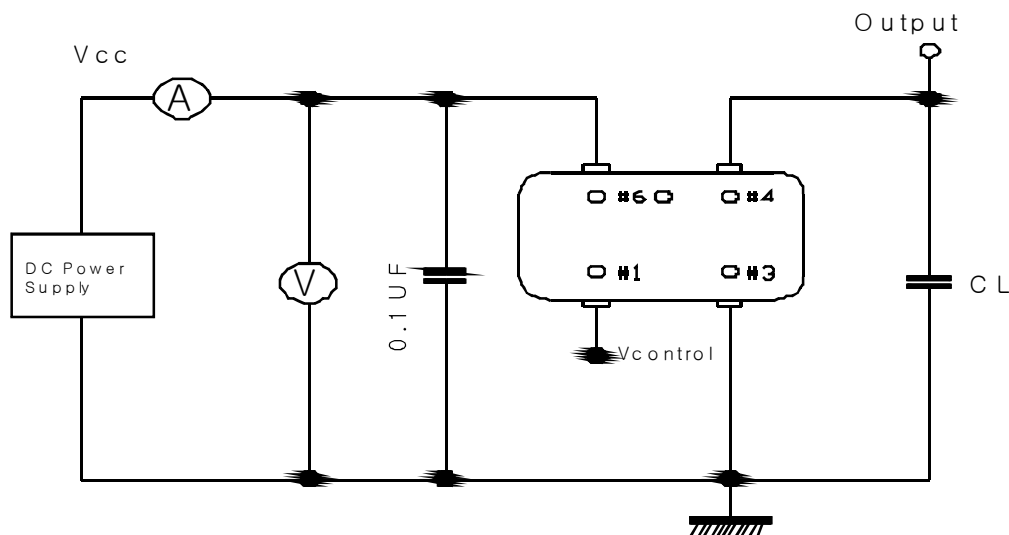
| Pin# | Symbol            | Function                            |
|------|-------------------|-------------------------------------|
| 1    | Vt <sub>rol</sub> | Control Voltage                     |
| 2    | NC                | This pin has no internal connection |
| 3    | GND               | Ground                              |
| 4    | OUtput            | Output Frequency                    |
| 5    | NC                | This pin has no internal connection |
| 6    | Vcc               | Supply Voltage                      |

## ■ TAPING AND REEL:



UNIT: mm

## ■ TEST CIRCUITS:



$C_L = 15\text{PF}$  (including fixture and probe capacitance)

## ■ OUTPUT WAVEFORM:

$$\text{Duty}(\eta) = [T_H / (T_H + T_L)] \times 100\%$$

