

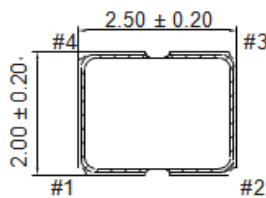
## OSC-S22L RTC Series : Low Power RTC SMD Crystal Clock Oscillator 2.5x2.0 mm 32.768KHz

### ● SPECIFICATION

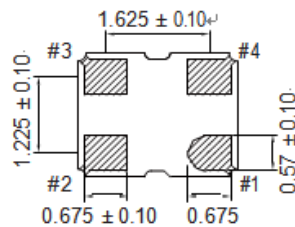
Model	OSC-S22L Low Power RTC Series
Frequency range	32.768KHz
Storage temperature range	- 55°C ~ + 125°C
Operation temperature range	- 10°C ~ + 70°C , - 40°C ~ + 85°C
Frequency stability	±20 ppm ~ ±50ppm
Power supply voltage	1.8V DC ±5%
Current consumption	1.8uA max
Output level	C-MOS
Load	15pF max.
Output voltage level	V <sub>OL</sub> : 10% V <sub>dd</sub> max. / V <sub>OH</sub> : 90% V <sub>dd</sub> min.
Start-up Time	20 m sec. max.
Duty cycle	40% ~ 60% at 1/2 V <sub>dd</sub>
RISE / FALL TIME	15nS max
AGING	±3ppm / Year

### ● DIMENSIONS (mm)

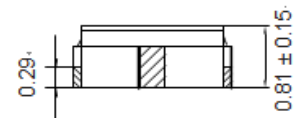
[ TOPVIEW ]



[ BOTTOM VIEW ]

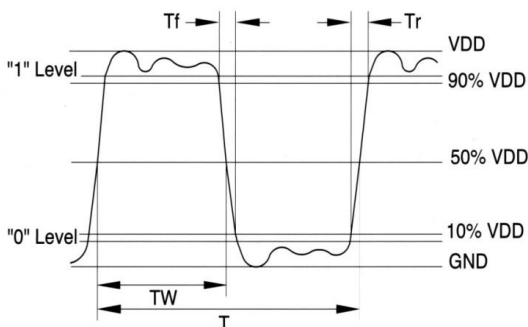


[ SIDE VIEW ]

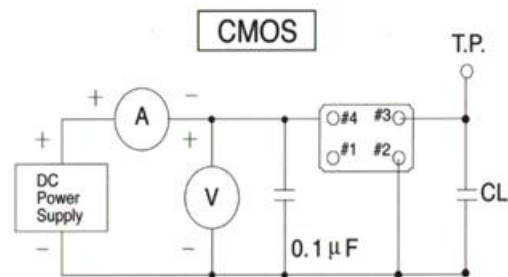


#1: E/D    #3: OUTPUT  
#2: GND    #4: VDC

### ● OUTPUT WAVEFORM



### ● TEST CIRCUIT



\*\*\* Because S22 series has no by pass capacitor.  
So, we recommend our customer to use capacitor 0.1μF  
in join Vcc and GND.