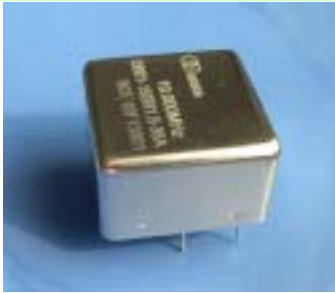


# OB01



Very high stability oven controlled crystal oscillator  
Applied in instrumentation, metrology, etc.

**Table1 Specifications**

| Parameter                                 |                           | OB01   |                       |
|---|---------------------------|--|-----------------------|
| Frequency Range                           |                           | 5~40MHz,   |                       |
| Standard Frequency                        |                           | 5, 10, 8.192, 12, 13, 16.384, 20, 26, 38.88MHz,  |                       |
| Frequency Stability                       | vs Operation Temp. Range  | $\pm 1 \times 10^{-8}$ , Stability Code is "1.8"                                       |                       |
|   | vs Vcc Change $\pm 5\%$   | $\pm 2 \times 10^{-9}$   |                       |
|   | vs Load Change $\pm 10\%$ | $\pm 2 \times 10^{-9}$   |                       |
|   | vs Aging                  | $\pm 5 \times 10^{-8}$ /year, $\pm 2 \times 10^{-10}$ /day @25 after 30 days operation |                       |
| Operation Temperature Range               |                           | -30~+70 , Temperature Range Code is "P"  |                       |
| Supply Voltage                            |                           | 5V, 9V, 12V, 15V(option code 5,9,12,15)  |                       |
| Current Consumption (@12Vcc)              |                           | 350mA max at Turn-on, 150mA max after warm up at 25                                    |                       |
| Short Term Stability(Allen Std Deviation) |                           | $\pm 1 \times 10^{-11}$ /s   |                       |
| Output                                    | Wave Form                 | Sine, 7dBm, Code is "S"  | TTL/CMOS, Code is "T" |
|   | Load                      | 50 $\Omega$  | 4TTL min              |
|   | Harmonic Suppression      | -30dB  | /                     |
|   | Non-Harmonic Suppression  | -70dBc   | /                     |
| SSB Phase Noise<br>(10MHz, typical)       |                           | -115dBc@10Hz   |                       |
|   |                           | -130dBc@100Hz  |                       |
|   |                           | -145dBc@1kHz   |                       |
|   |                           | -150dBc@10kHz  |                       |
| Warm-up Time@25 Typical                   |                           | $\pm 1 \times 10^{-8}$ after 20 minutes  |                       |
| Frequency Adjustment (from 0V to Vref.)   |                           | $\pm 7 \times 10^{-7}$   |                       |
| Package                                   |                           | 38A,50D  |                       |
| Storage Temperature Range                 |                           | -40~+85  |                       |

## OCXOs

### Part Numbering Key

| SERIES      | PACKAGE CODE | Supply Voltage                   | OUTPUT FORM          | FREQ. STABILITY vs.TEMP                  | FREQUENCY        |
|-------------|--------------|----------------------------------|----------------------|--|------------------|
| OB01        | 38A          | 5=5V<br>9=9V<br>12=12V<br>15=15V | S=Sine<br>T=TTL/CMOS | 1.8= $\pm 1 \times 10^{-8}$<br>P=-30~+70 |                  |
| <b>OB01</b> | <b>38A</b>   | <b>12</b>                        | <b>S</b>             | <b>P1.8</b>                              | <b>10.000MHz</b> |

Sample Part Numbers

**OB01-38A-12S-P1.8  
@10.000Mhz**