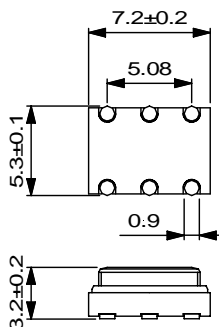


## SURFACE MOUNT MINIATURE PRECISION OSCILLATOR DFN S2-LE (3.3 V)

### KEY FEATURES

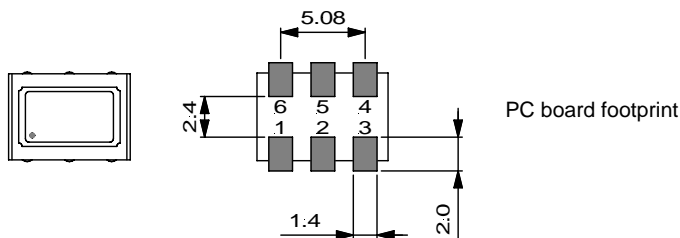
**16 to 213 MHz**  
**± 20 ppm/10 years stability available**  
**1 ps RMS jitter over 50 kHz to 80 MHz B.W.**  
**For Sonet/SDH/datacomms applications**



### Marking:

DFN S2-LEC  
Frequency  
Code yrwk

| Pin | DFN S2-LE |
|-----|-----------|
| 1   | E / D     |
| 2   | NC        |
| 3   | GND       |
| 4   | Output 1  |
| 5   | Output 2  |
| 6   | Vcc       |



| TYPE            | DFN S2-LECPI  |
|-----------------|---------------|
| Frequency Range | 16 to 213 MHz |

| ELECTRICAL SPECIFICATIONS       |                                      |
|---------------------------------|--------------------------------------|
| supply voltage                  | 3.3 V ± 5 %                          |
| supply current (no load)        | ≤ 60 mA                              |
| output load                     | LVPECL 100 K ( 50 Ω to 1.3 V )       |
| duty cycle @ 50% level          | 45/55...55/45 %                      |
| rise/fall times ( 20 to 80% )   | ≤ 0.5 ns                             |
| high/low levels                 | ≥ 2.22 V / ≤ 1.7 V                   |
| jitter RMS ( 12 kHz to 5 MHz )  | ≤ 0.5 ps                             |
| jitter RMS ( 50 kHz to 80 MHz ) | ≤ 1 ps ( f = 155.52 MHz )            |
| enable / disable on pin 1       | low or open = enable, high = disable |
| complementary output on pin 5   | 180° phase shifted                   |
| start up                        | ≤ 10 ms @ 3.15 V                     |

| FREQUENCY STABILITY |  | stability [ ppm ] and temperature code |      |           |      |           |      |           |       |
|---------------------|--|--|------|-----------|------|-----------|------|-----------|-------|
| types               | temperature range  | stability                              | code | Stability | code | stability | code | stability | code  |
| all types           | 0 to 70°C  | ± 20                                   | XB20 | ± 25      | XB25 | ± 50      | XB50 | ± 100     | XB100 |
|                     | -40 to 85°C  | ± 25                                   | XE25 | ± 50      | XE50 | ± 75      | XE75 | ± 100     | XE100 |
| remark              | includes calibration at 25°C, temperature, ageing, Vcc and load changes 1 <sup>st</sup> year |  |      |           |      |           |      |           |       |

| OPTIONS                       |                               |
|-------------------------------|-------------------------------|
| Stability over long life time | A = 5 years      B = 10 years |

| ORDERING CODE | type + option code + frequency + stability / temperature code |
|---------------|---|
| Example       | DFN S2-LECPI 155.52 MHz XB20                                  |

| REMARK | Please consult factory for life time/stabilities and frequency/stabilities possible combinations |
|--------|--|
|        |  |