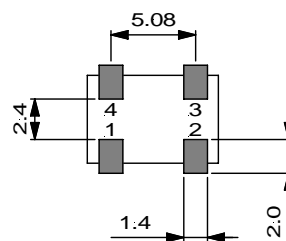
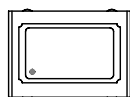
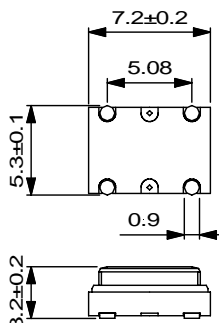


**WIMAX ULTRA MINIATURE SURFACE MOUNT TCXO**  
**DFA S2-KHZ (5 V) & LHZ (3.3 V)**

| FEATURES  |
|---|
| 5 to 52 MHz<br><br>WiMax compliant over -40 to 85°C |
| APPLICATIONS  |
| WiMax   |

| Function           | DFA S2 |
|--------------------|--------|
| E / D or V control | 1      |
| GND                | 2      |
| Output             | 3      |
| Vcc                | 4      |



PC board footprint

| TYPE            | DFA S2-KHZ  | DFA S2-LHZ  |
|-----------------|-------------|-------------|
| Frequency Range | 5 to 52 MHz | 5 to 52 MHz |

| ELECTRICAL SPECIFICATIONS           | DFA S2-KHZ                          | DFA S2-LHZ                          |
|-------------------------------------|-------------------------------------|-------------------------------------|
| supply voltage                      | 5 V ± 5 %                           | 3.3 V ± 5 %                         |
| supply current ( no load)           | ≤ 20 mA                             | ≤ 10 mA                             |
| output load                         | HCMOS 15 pF or 2 TTL                | HCMOS 15 pF or 2 TTL                |
| duty cycle @ 50% level              | 45/55...55/45 %                     | 45/55...55/45 %                     |
| rise/fall times (10 to 90 %)        | ≤ 5 ns                              | ≤ 5 ns                              |
| high/low levels or output amplitude | ≥ 4.5 V / ≤ 0.5 V                   | ≥ 2.8 V / ≤ 0.3 V                   |
| start-up                            | ≤ 10 ms @ 4.75 V                    | ≤ 10 ms @ 3.15 V                    |
| tri-state control on pin 1          | high or open = enable, low = high Z | high or open = enable, low = high Z |

| FREQUENCY STABILITY |                   |            | detailed tolerances [ ppm ] |                                |                       |                    |                     |
|---------------------|-------------------|------------|-----------------------------|--------------------------------|-----------------------|--------------------|---------------------|
| type                | temperature range | model code | temperature                 | stability versus:<br>Vcc ± 5 % | Ageing                | calibration @ 25°C | Overall Stability   |
| all types           | -40 to 85°C       | WMX        | ± 2 typ                     | ± 0.3 typ                      | ± 4 over 10 years typ | ± 1 typ            | ≤ ± 8 over 10 years |
| remark              |                   |            | ageing is at 25°C           |                                |                       |                    |                     |

| OPTIONS   | CODE |  |
|---|------|--|
| voltage control (positive slope)                          | V    | ≥ ± 9 ppm, ≤ ± 15 ppm<br>2.5 V ± 2 V     |
| remark  |      | ≥ ± 9 ppm, ≤ ± 15 ppm<br>1.65 V ± 1.35 V |
| No tri-state function with this option (code LHV and KHV) |      |  |

| ORDERING CODE | type + option code + frequency + model code |
|---------------|---|
| Example       | DFA S2-LHZ 28.8 MHz WMX                     |