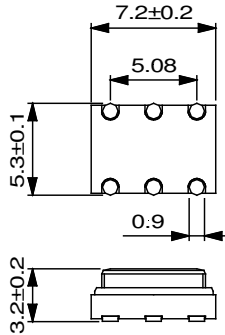


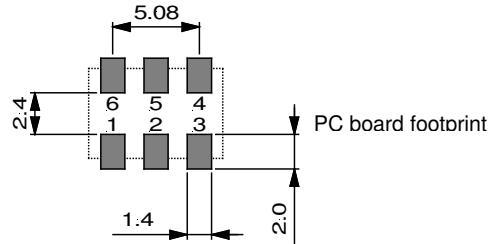
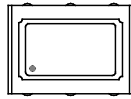
MINIATURE SURFACE MOUNT VCXO

DFV S2-KHZ (5 V) & DFV S2-LHZ (3.3 V)

| KEY FEATURES |
|---|
| <p>2 to 52 MHz</p> <p>± 20 ppm overall stability available</p> <p>Encapsulated crystal</p> |
| APPLICATIONS |
| Sonet/SDH/Switching |



| Function | DFV S2 |
|-----------------------|--------|
| V control | 1 |
| N/C or Enable/Disable | 2 |
| GND | 3 |
| Output | 4 |
| N/C or Enable/Disable | 5 |
| Vcc | 6 |



| TYPE | DFV S2-KHZ | DFV S2-LHZ |
|-----------------|-------------|-------------|
| Frequency Range | 2 to 52 MHz | 2 to 52 MHz |

| ELECTRICAL SPECIFICATIONS | | |
|---------------------------------------|-------------------------------------|-------------------------------------|
| supply voltage | 5 V ± 5 % | 3.3 V ± 5 % |
| supply current (no load) | ≤ 15 mA | ≤ 10 mA |
| | ≤ 35 mA | ≤ 25 mA |
| output load (HCMOS) | 25 pF up to 25 MHz, 15 pF above | 15 pF |
| duty cycle | 45/55...55/45 % @ 50% level | 45/55...55/45 % @ 50% level |
| rise/fall times (@ 15 pF load) | 10 to 90 % : ≤ 5 ns | 10 to 90 % : ≤ 5 ns |
| high/low levels | ≥ 4.5 V / ≤ 0.5 V | ≥ 2.8 V / ≤ 0.3 V |
| tri-state control (pin 2) (pin 5 N/C) | high or open = enable, low = high Z | high or open = enable, low = high Z |
| start up | ≤ 10 ms @ 4.75 V | ≤ 10 ms @ 3.15 V |

| FREQUENCY STABILITY | | | tolerances [ppm] | | | |
|---------------------|-------------------|------------|---|---------------|----------|-----------------|
| type | temperature range | model code | overall stability | pulling range | function | control voltage |
| DFV S2-KHZ | 0 to 70 °C | 100XB20 | ≤ ± 20 | ≥ ± 100 | positive | 2.5 V ± 2.5 V |
| | | 100XB25 | ≤ ± 25 | | | |
| | -40 to 85 °C | 100XE50 | ≤ ± 50 | | | |
| DFV S2-LHZ | 0 to 70 °C | 90XB20 | ≤ ± 20 | ≥ ± 90 | positive | 1.65 V ± 1.65 V |
| | | 90XB25 | ≤ ± 25 | | | |
| | -40 to 85 °C | 90XE50 | ≤ ± 50 | | | |
| remarks | | | input impedance ≥ 10 kΩ | | | |
| | | | includes calibration @ 25 °C, temperature, ageing, Vcc and load changes | | | |
| | | | ageing is 1 st year at 25 °C | | | |

| OPTIONS | CODE | |
|----------------------------|------|---|
| tri-state control on pin 5 | Z5 | high or open = enable, low = high Z (pin 2 N/C) |

| ORDERING CODE | type + option code + frequency + model code |
|---------------|---|
| Example | DFV S2-LHZ 34.368 MHz 90XB20 |