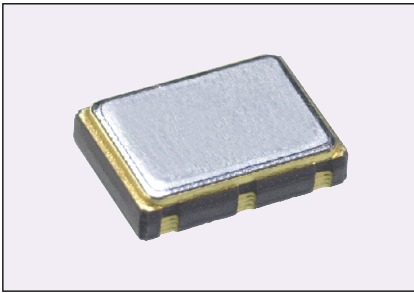


Crystal Clock Oscillator



TCO-7116X1V

SMO-N-K VCXO

Features

- CMOS logic output
- Ceramic package
- Space saving
- Enable / Disable feature
- Voltage controlled oscillator

Specifications

Absolute Maximum Ratings

| Parameter | Symbol | Rating |
|---------------------|-----------------------|--------------------------------------|
| Supply voltage | V _{cc} | -0.5 to +6.0 V |
| Input voltage | V _{IN} | -0.5 to V _{cc} +0.5 V |
| Output voltage | V _O | -0.5 to V _{cc} +0.5 V |
| Output current | I _O | ±10 mA |
| Storage temperature | T _{stg} | -55 to +125°C |
| Soldering condition | T _{sol} T | +260°C / 20sec or +230°C / 180sec |

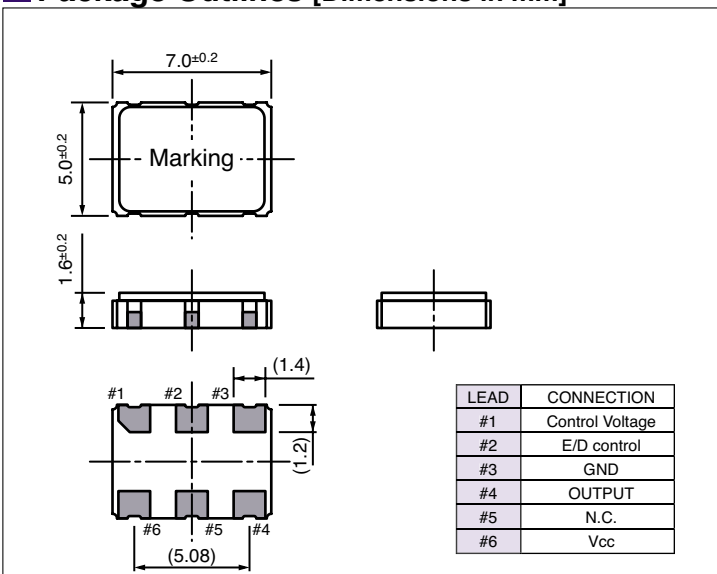
| Parameter | | TCO-7116X1V | Conditions |
|-----------------------|------------------------------------|---|--|
| Frequency | f _o | 1.5 to 55 MHz | (*1) |
| Frequency Stability | Δf/f _o | ±50 ppm max. | (*2) |
| Pullability | | ±100 ppm min. | at V _{cont} =0.0 to +3.3V Ref=+1.65V |
| Control Voltage Range | V _{cont} | +1.65 V ±1.65 V | DC, Lead #1 |
| Operating Temperature | T _{opr} | 0°C to +70°C | |
| Supply Voltage | V _{cc} | +3.3 V ±5 % | DC, Lead #6 |
| Supply Current | I _{cc} | 25 mA max. | V _{cc} =+3.46V |
| Input Voltage | V _{IH} V _{IL} | V _{IH} =70% V _{cc} min. / V _{IL} =30% V _{cc} max. | #2:V _{IH} or OPEN ... Enable #2:V _{IL} or GND ... Disable |
| Output Voltage | V _{OH} V _{OL} | V _{OH} =90% V _{cc} min. / V _{OL} =10% V _{cc} max. | I _{OH} =-0.8mA, I _{OL} =+3.2mA, Lead #4 |
| Symmetry | SYM | 40 to 60 % | CMOS logic output at 50 % V _{cc} |
| Rise/Fall time | tr/tf | 10 ns max. | CMOS logic output at 20 to 80% V _{cc} |
| Load Capacitance | CL | 15 pF max. | CMOS logic output |
| Start-up time | t _{st} | 5 ms max. | (*3) |

*1 Please contact us for standard frequency.

*2 Inclusive of calibration tolerance at +25°C, operating temperature, operating voltage range.

*3 Rise time (0 to +3.0V) of V_{cc}>150μs

Package Outlines [Dimensions in mm]



Test Circuit

See Test Circuit page TEST-8

Footprint [Dimensions in mm]

