

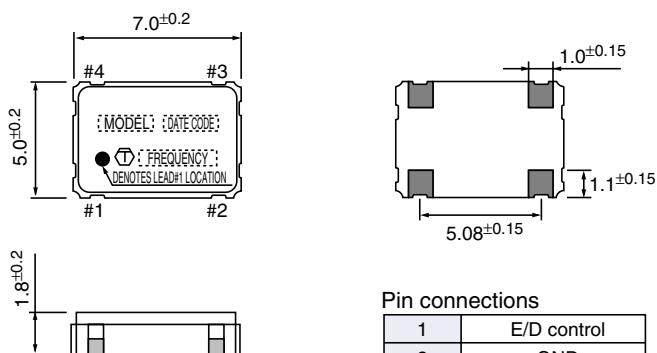
Product Data (SMO-N)**TCO-786ZH, 787ZH****Features**

- CMOS/TTL output
- Small size : 7W × 5D × 2Hmm
- Enable/Disable control (Oscillation standby function)
- Low operating voltage (+3.3V)

**Specifications**

Type		TCO-786ZH	TCO-787ZH
Frequency	f ₀	1.5 to 80 MHz	
Frequency stability*	Δf/f ₀	±50 ppm	±100 ppm
Operating temperature	T _{opr}	0 to +70°C	
Supply voltage	V _{cc}	+3.3 VDC±10 %	
Supply current	I _{cc}	6 mA Max. (1.5 ≤ f ₀ ≤ 12 MHz) 10 mA Max. (12 < f ₀ ≤ 26 MHz) 15 mA Max. (26 < f ₀ ≤ 28 MHz)	25 mA Max. (28 ≤ f ₀ ≤ 40 MHz) 35 mA Max. (40 < f ₀ ≤ 70 MHz) 45 mA Max. (70 < f ₀ ≤ 80 MHz)
Input voltage	V _{IH} V _{IL}	70% V _{cc} Min. 30% V _{cc} Max.	
Output voltage	V _{OH} V _{OL}	90% V _{cc} Min. 10% V _{cc} Max.	
Symmetry	SYM	45 to 55% (50% V _{cc} level) 40 to 60% (+1.4 V level)	
Rise/Fall time	t _{r/tf}	6 nSec. Max. (1.5 ≤ f ₀ ≤ 36 MHz) at 20 to 80% V _{cc} (CMOS) at +0.4 to +2.4 V (TTL)	4 nSec. Max. (36 < f ₀ ≤ 80 MHz)
Load capacitance	C _L	30 pF Max.	
Fanout	n	5 Max.	
Start-up time	t _{st}	10 mSec. Max. (1.5 ≤ f ₀ ≤ 80 MHz)	
Measuring circuit		TEST-2, 4	
Sealing		Glass sealed	

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

Outline Drawing [mm]**Pin connections**

1	E/D control
2	GND
3	Output
4	V _{cc} (DC)