

Product Data (SMO-N-K)

TCO-787SH3, 785SH, 785YH

Features

- Small size : 7W × 5D × 1.8Hmm
- Enable/Disable control (Oscillation standby function)

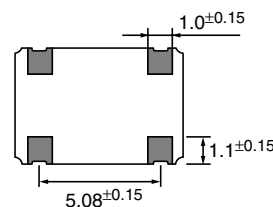
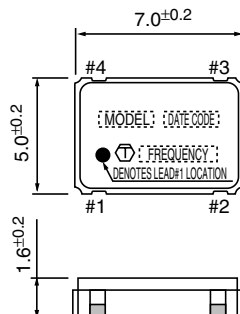


Specifications

| Type | | TCO-787SH3 | | TCO-785SH | TCO-785YH |
|-----------------------|------------------------------------|--|--|---|--|
| Frequency | fo | 1.5 to 36 MHz | | 1.5 to 70 MHz | 1.5 to 80 MHz |
| Frequency stability* | Δf/fo | ±100 ppm | | ±25 ppm | |
| Operating temperature | ToPr | 0 to +70°C | | | |
| Supply voltage | Vcc | +5 VDC±10 % | +3.3 VDC±10 % | +5 VDC±5 % | +3.3 VDC±5 % |
| Supply current | Icc | 10 mA Max. (1.5 ≤ fo ≤ 10 MHz) 15 mA Max. (10 < fo ≤ 26 MHz) 35 mA Max. (26 < fo ≤ 36 MHz) | 7 mA Max. (1.5 ≤ fo ≤ 10 MHz) 13 mA Max. (10 < fo ≤ 26 MHz) 30 mA Max. (26 < fo ≤ 36 MHz) | 10 mA Max. (1.5 ≤ fo ≤ 10 MHz) 15 mA Max. (10 < fo ≤ 26 MHz) 35 mA Max. (26 < fo ≤ 50 MHz) 50 mA Max. (50 < fo ≤ 70 MHz) | 6 mA Max. (1.5 ≤ fo ≤ 12 MHz) 10 mA Max. (12 < fo ≤ 26 MHz) 15 mA Max. (26 < fo ≤ 28 MHz) 25 mA Max. (28 < fo ≤ 40 MHz) 35 mA Max. (40 < fo ≤ 70 MHz) 45 mA Max. (70 < fo ≤ 80 MHz) |
| Input voltage | V _{IH} V _{IL} | 70% Vcc Min. 20% Vcc Max. | | +3.5 V Min. +1.5 V Max. | 70% Vcc Min. 30% Vcc Max. |
| Output voltage | V _{OH} V _{OL} | Vcc-0.4 V Min. +0.4 V Max. | | Vcc-0.4 V Min. +0.4 V Max. | 90% Vcc Min. 10% Vcc Max. |
| Symmetry | SYM | 45 to 55% (50% Vcc level) | 40 to 60% (50% Vcc level) | 45 to 55% (50% Vcc level) | 45 to 55% (50% Vcc level) 40 to 60% (+1.4 V level) |
| Rise/Fall time | tr/tf | 12 nSec. Max. (1.5 ≤ fo ≤ 26 MHz) 10 nSec. Max. (26 < fo ≤ 36 MHz) at 10 to 90% Vcc | 12 nSec. Max. (1.5 ≤ fo ≤ 10 MHz) 10 nSec. Max. (10 < fo ≤ 26 MHz) 8 nSec. Max. (26 < fo ≤ 36 MHz) at 20 to 80% Vcc | 12 nSec. Max. (1.5 ≤ fo ≤ 26 MHz) 10 nSec. Max. (26 < fo ≤ 50 MHz) 6 nSec. Max. (50 < fo ≤ 70 MHz) at 10 to 90 % Vcc | 6 nSec. Max. (1.5 ≤ fo ≤ 36 MHz) 4 nSec. Max. (36 < fo ≤ 80 MHz) at 20 to 80 % Vcc (CMOS) at +0.4 to +2.4V (TTL) |
| Load capacitance | CL | 50 pF Max. (1.5 ≤ fo ≤ 26 MHz) 30 pF Max. (26 < fo ≤ 36 MHz) | 15 pF Max. (1.5 ≤ fo ≤ 36 MHz) | 50 pF Max. (1.5 ≤ fo ≤ 26 MHz) 30 pF Max. (26 < fo ≤ 50 MHz) 15 pF Max. (50 < fo ≤ 70 MHz) | 30 pF Max. (1.5 ≤ fo ≤ 80 MHz) |
| Fanout | n | — | | | 5 Max. (TTL) |
| Start-up time | t _{st} | 4 mSec. Max. (1.5 ≤ fo ≤ 26 MHz) 10 mSec. Max. (26 < fo ≤ 36 MHz) | | 4 mSec. Max. (1.5 ≤ fo ≤ 26 MHz) 10 mSec. Max. (26 < fo ≤ 70 MHz) | 10 mSec. Max. (1.5 ≤ fo ≤ 80 MHz) |
| Measuring circuit | | TEST-4 | | | TEST-2, 4 |
| Sealing | | Seam welded | | | |

* 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 | Vcc (DC) |