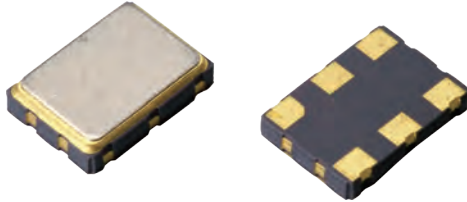


# CRYSTAL OSCILLATOR

## LV-PECL/LVDS

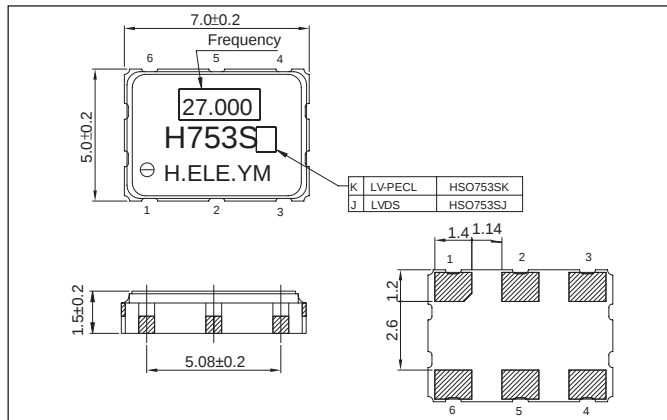
### HSO753S Series



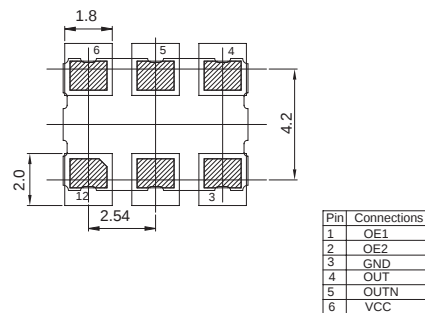
#### Features:

- Ceramic Package Size: 7.0×5.0×1.5 mm
- Low power supply voltage (2.5V/3.3V) and wide frequency range (25MHz to 212.5MHz).
- LV-PECL or LVDS output options.
- Excellent phase noise and jitter max.1ps integrated 12 KHz ~ 20 MHz.
- Tri-state function available.
- Ideal for Fiber-optic communication applications, FTTH and SONET/SDH applications, Server, FC-HBA, Fibre Channel, Gigabit Ethernet, and Serial ATA.

#### Dimension (mm):



#### Recommended Land Pattern (mm) <Top View>



#### Standard Specification:

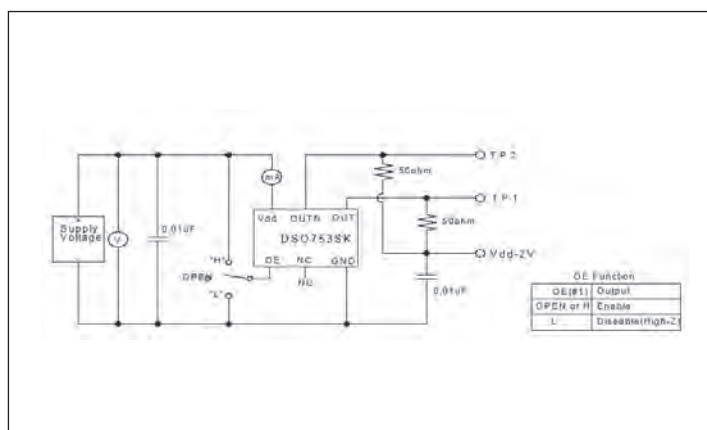
| ITEM                                | TYPE | HSO753SK                          | HSO753SJ                          |
|-------------------------------------|------|-----------------------------------|-----------------------------------|
| Output Specification                |      | LV-PECL                           | LVDS                              |
| Output Frequency Range              |      | 25~212.5MHZ                       |                                   |
| Supply Voltage                      |      | +2.5±0.125V/+3.3±0.165V           |                                   |
| Frequency Tolerance                 |      | ±50ppm max                        |                                   |
| Operating Temp.                     |      | -10°C ~70°C                       |                                   |
| Storage Temp.                       |      | -40°C ~85°C                       |                                   |
| Current Consumption                 |      | 80mA                              | 80mA                              |
| Stand-by Current (#1 pin "L" Level) |      | 10µA max.                         |                                   |
| Load Resistance                     |      | 50Ω to vdd-2                      | 100Ω Output-OUTN                  |
| Symmetry                            |      | 45~55% [at outputs cross point]   |                                   |
| Start-up Time                       |      | 10 ms max                         |                                   |
| "0" Level Output Voltage            |      | Vdd-1.81~Vdd-1.62V                | -                                 |
| "1" Level Output Voltage            |      | Vdd-1.025~Vdd-0.88V               | -                                 |
| Rise and Fall Time                  |      | 1ns max.<br>[20~80% Output Level] | 1ns max.<br>[20~80% Output Level] |
| OE Pin 0 Level Input Voltage        |      | Vdd×0.3 Max.                      |                                   |
| OE Pin 1 Level Input Voltage        |      | Vdd×0.7 Min.                      |                                   |
| Phase Jitter                        |      | 1 ps max. ( 12 KHz ~ 20 MHz )     |                                   |



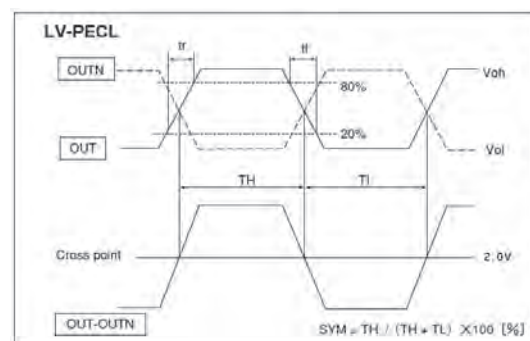
## Test Circuit and Output Waveform:

### ■LV-PECL

#### Measurement Circuit

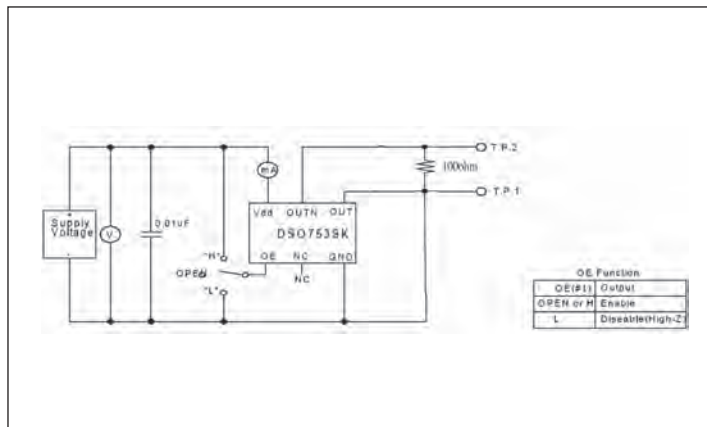


#### Output Waveform



### ■LVDS

#### Measurement Circuit



#### Output Waveform

