



加高電子股份有限公司
HARMONY ELECTRONICS CORP.



CRYSTAL OSCILLATOR

LV-PECL/LVDS

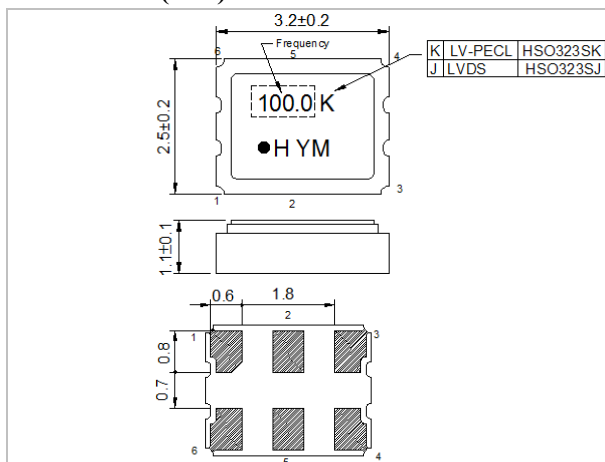
HSO323S Series



Features:

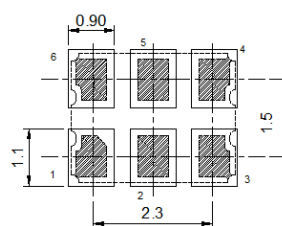
- Ceramic Package Size: 3.2×2.5×1.1 mm
- Low power supply voltage (2.5V/3.3V) and wide frequency range (25MHz to 212.5MHz).
- LV-PECL or LVDS output options.
- Excellent phase noise and jitter max.1ps integrated 12 KHz ~ 20 MHz.
- Tri-state function available.
- Ideal for Fiber-optic communication applications, FTTH and SONET/SDH applications, Server, FC-HBA, Fibre Channel, Gigabit Ethernet, and Serial ATA.

Dimension (mm):



Recommended Land Pattern (mm)

<Top View>



Pin	Connections
1	OE1
2	OE2
3	GND
4	OUT
5	OUTN
6	VCC

UNIT: mm
TOLERANCE: ±0.2

Standard Specification:

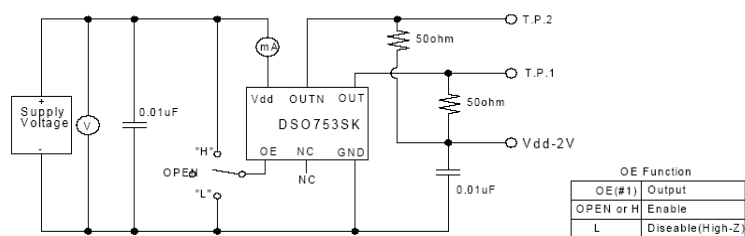
ITEM	TYPE	HSO323SK	HSO323SJ
Output Specification		LV-PECL	LVDS
Output Frequency Range		25~212.5MHZ	
Supply Voltage		+2.5±0.125V/+3.3±0.165V	
Frequency Tolerance		±50ppm max	
Operating Temp.		-10°C~70°C	
Storage Temp.		-40°C~85°C	
Current Consumption		80mA	80mA
Stand-by Current (#1 pin "L" Level)		10µA 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. [20~80% Output Level]	1ns max. [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)	

*Packing Unit : 3,000pcs/Reel.

Test Circuit and Output Waveform:

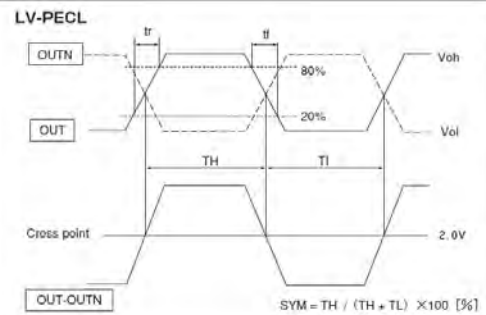
■ LV-PECL

Measurement Circuit



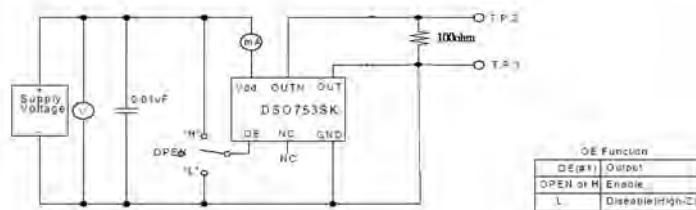
OE Function	
OE(#1)	Output
OPEN or H	Enable
L	Disable(High-Z)

Output Waveform



■ LVDS

Measurement Circuit



OE Function	
OE(#1)	Output
OPEN or H	Enable
L	Disable(High-Z)

Output Waveform

