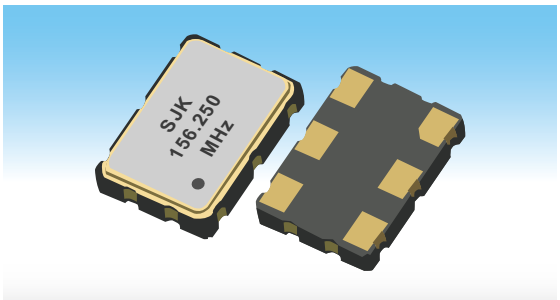
SMD Differential Crystal Oscillator

7H Series SMD 7050 HCSL Crystal Oscillator 13.5~700MHz O: HCSL Size: 7.0×5.0×1.5mm



Actual size

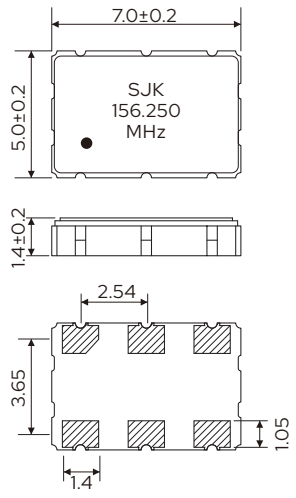
Features

- SMD 7050 HCSL output high speed type crystal oscillator
- 3-state function
- Operating voltage: 1.8V / 2.5V / 3.3V
- High frequency range: 13.5MHz~700MHz
- Very low phase jitter: <1 pS (0.6 pS, Typ.) RMS
- Low phase noise and jitter
- Application for server, Optical transmission device, Base station, Ethernet, Telecommunications, Automotive, etc
- RoHS Compliant /Pb Free

Standard Specifications

Item \ Type	7H Series SMD 7050 HCSL Crystal Oscillators		
Output Type	HCSL		
Load condition	50Ω		
Frequency Range	13.5MHz~220MHz	100MHz~175MHz	150MHz~700MHz
Supply Voltage	1.8V / 2.5V / 3.3V		
Frequency Stability (All Condition)	±25ppm, ±50ppm, ±100ppm, or specify		
Current Consumption	30mA max.	30mA max.	115mA max.
Stand-by Current	10μA max.		
Symmetry	45~55%		
0 Level Output Voltage (V_{OL})	-0.15V~0.15V	-0.15V~0.15V	-0.15V~0.15V
1 Level Output Voltage (V_{OH})	0.5V~0.9V	0.55V~1.0V	0.66V~1.15V
Rise Time / Fall Time	0.5ns max.		
OE Pin 0 Level Input Voltage (V_{IL})	0.3Vcc max.		
OE Pin 1 Level Input Voltage (V_{IH})	0.7Vcc min.		
Output Voltage Swing	400mV min.	450mV min.	450mV min.
Start-up Time	10ms max.		
Operating Temperature Range	-20~+70°C, -40~+85°C, or specify		
Storage Temperature Range	-55~+125°C		
Phase Jitter (12KHz~20MHz)	0.5ps max.	300fs max.	163fs typ.

Dimensions

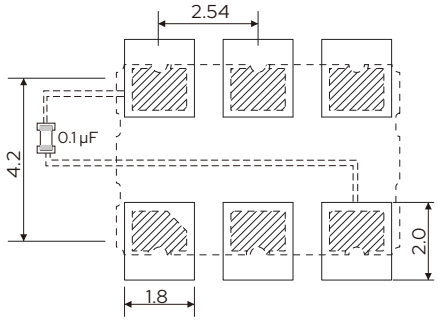


Pin Connections

Pin No.	Connection
#1	OE (Output Enable)
#2	NC
#3	GND
#4	Output
#5	OutputN
#6	Vcc

Functions

#1 input	#4, #5 output condition
H	Oscillation out
Open	Oscillation out
L	High Z

Recommended Land Pattern [mm]

Top View