

Surface Mount Type

3D [3.2×2.5×1.00 mm]	5D [5.0×3.2×1.25 mm]	7B [7.0×5.0×1.45 mm]
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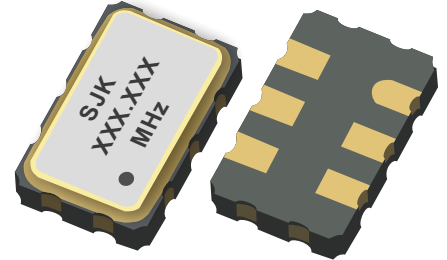
Output
LVDS

Supply Voltage
2.5V / 3.3V

Frequency Range
10 MHz~1500 MHz

Features

- Surface mount package size 3.2×2.5 (3225), 5.0×3.2 (5032), 7.0×5.0 (7050), mm×mm
- Differential output Simple Package Crystal Oscillator (SPXO)
- LVDS output, frequency range from 10 MHz to 1500 MHz
- 2.5V / 3.3V operating voltage
- RoHS Compliant
- Very low phase jitter: <1 pS (0.3 pS, Typ.) RMS
- Tri-state available
- Applications: Fiber channel, Storage area network, SONET, Server, Smart grid, Gigabit ethernet, and more



Standard Specifications

Item / Type	3D (SMD 3225 LVDS SPXO)	5D (SMD 5032 LVDS SPXO)	7B (SMD 7050 LVDS SPXO)
Dimensions	3.2×2.5×1.00 mm	5.0×3.2×1.20 mm	7.0×5.0×1.40 mm
Output	LVDS		
Output load	100Ω		
Output frequency range	10 MHz~250 MHz	10 MHz~1500 MHz	10 MHz~1500 MHz
Supply voltage	2.5 V / 3.3 V		
Frequency tolerance (All condition)	±25 ppm, ±50 ppm, ±100 ppm		
Operating temperature	-20~+70°C, -40~+85°C		
Current consumption	100mA max.		
Symmetry	45 % to 55 %		
Differential output voltage (V _{OD})	250 mV~450 mV		
Change to V _{OD}	50 mV max.		
Offset Voltage (V _{OS})	1.15 V~1.35 V		
Offset to V _{OS}	50 mV max.		
Input voltage V _{IH} (min.)	70% V _{CC} min.		
Input voltage V _{IL} (max.)	30% V _{CC} max.		
Rise time / Fall time	1 ns max.		
Start-up time	10ms max.		
Storage temperature	-55~+125°C		
Phase jitter (12 KHz~20 MHz)	1 pSec Max.		

Surface Mount Type

3J, 3D, 3H

[3.2×2.5×1.00 mm]

5J, 5D, 5H

[5.0×3.2×1.25 mm]

7J, 7B, 7H

[7.0×5.0×1.45 mm]

Output

LVPECL, LVDS, HCSSL

Supply Voltage

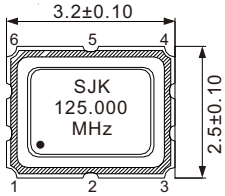
2.5V / 3.3V

Frequency Range

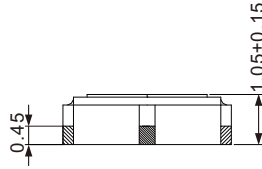
13.5 kHz~220 MHz

Outline Dimensions (Unit: mm)

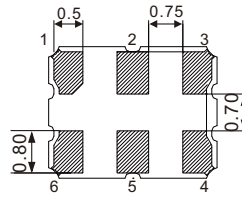
3J, 3D, 3H (3.2×2.5×1.00 mm)



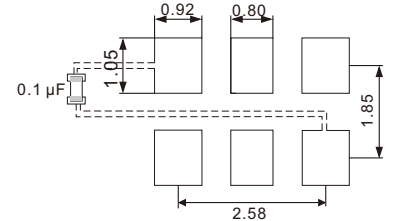
Top View



Side View

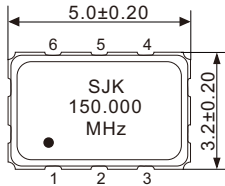


Bottom View

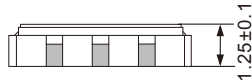


Footprint (Recommender)

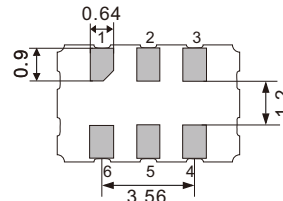
5J, 5D, 5H (5.0×3.2×1.25 mm)



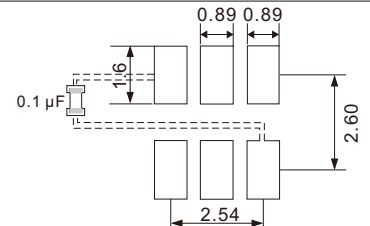
Top View



Side View

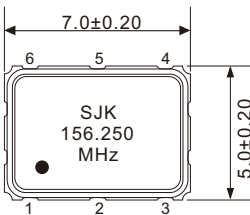


Bottom View

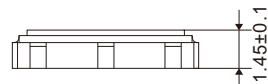


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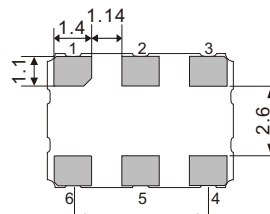
7J, 7B, 7H (7.0×5.0×1.45 mm)



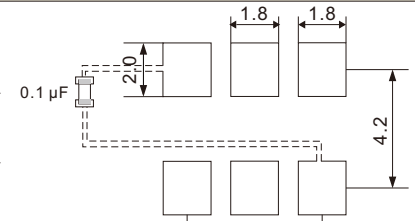
Top View



Side View



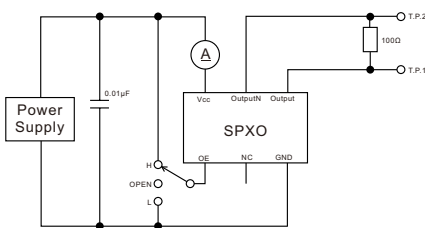
Bottom View



Footprint (Recommender)

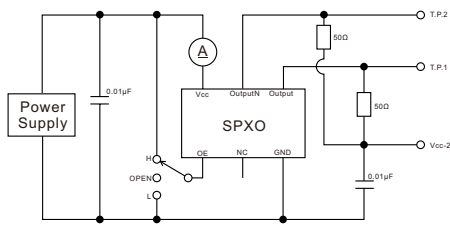
Measurement Circuit

3D, 5D, 7B



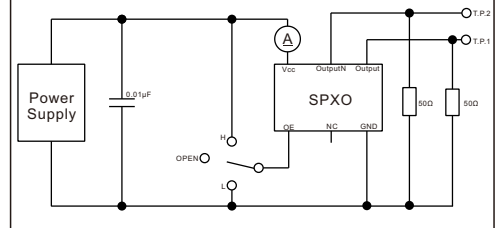
LVDS

3J, 5J, 7J



LVPECL

3H, 5H, 7H



HCSSL

Pin Map

Pin	Connection	Function
1	OE / Tri-State	“H” or “OPEN”: specified frequency output; “L”: output is high impedance
2	N.C.	No connect (Open or Vcc)
3	GND	Vcc power supply ground
4	OUT	Oscillator output
5	OutputN	Complementary oscillator output
6	Vcc	Power supply voltage