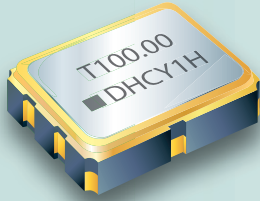


# SMD HCSL Crystal Oscillators - Differential Output

## 3.2 x 2.5 x 0.95 mm DH Series



### Features

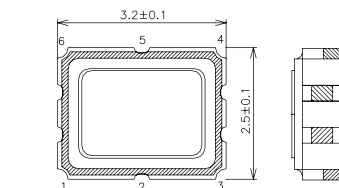
- 3.3V and 2.5V operation available.
- HCSL output, output frequencies 25 MHz to 200 MHz.
- Excellent low phase noise and jitter.
- Tri-State function available.
- PCI-Express, SAS, SATA and other high-Speed interface applications.
- RoHS Compliant / Pb Free.

### Electrical Specifications

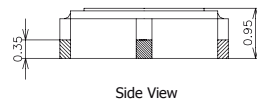
Item / Type	DH
Output Type	HCSL
Output Load	50 Ω
Oscillation Mode	3rd Overtone
Supply Voltage	2.5 V , 3.3 V
Frequency Range	25 MHz to 200 MHz
Overall Frequency Stability *	± 50 ppm , or specify
Operating Temperature Range	-10 ~ + 70 °C , - 40 ~ + 85 °C , or specify
Storage Temperature Range	- 55 ~ + 125 °C
Voltage Vol ( Typ. ) / Voh ( Typ. )	0 mV / 740 mV
Rise ( Tr ) / Fall ( Tf ) Time ( 20 % ~ 80 % )	0.5 nS Max.
Supply Current	30 mA Max.
Symmetry	45 ~ 55 %
Start-up Time	10 mS Max.
Phase Jitter ( 12 KHz ~ 20 MHz )	1.0 pS Max.

\* Inclusive of frequency tolerance at 25 °C, variation over temperature, supply voltage variation, aging and vibration.

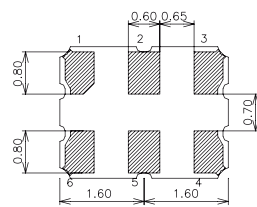
### Dimensions



Top View



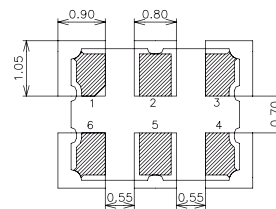
Side View



Bottom View

#### PAD FUNCTION:

- 1: ENABLE CONTROL or NC
- 2: ENABLE CONTROL or NC
- 3: GND
- 4: OUT
- 5: OUTN
- 6: VDD



Top View Suggested Layout

Units: mm