

3.3V LVDS Low Jitter XO



[PP & HUDPLF 60'

Product Features

- WR O+]) UHTXHQF\ 5 DQJH
- SV 506 MLWWHU ZLWK QRO 3// GHVLJO
- Designed for standard reflow & washing
- WHFKQLTXHV
- IBIS models available
- 3E IUHH 5R+6 *UHHQ FRPSOLDOW

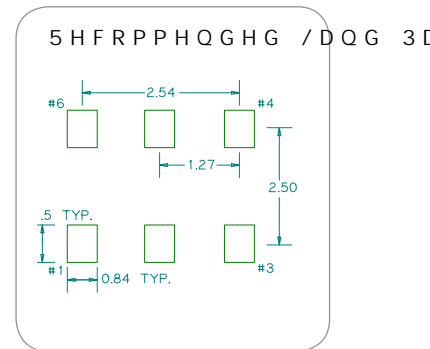
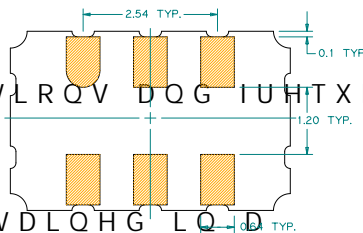
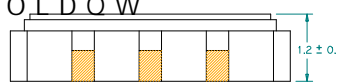
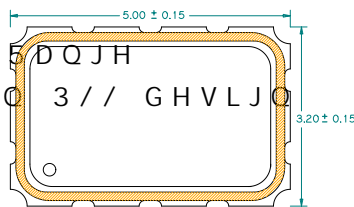
Product Description

The LD Series 3.3V crystal clock oscillator achieves superb jitter and stability over a broad UDOJH RI RSHUDWLQJ FRQGLWLRQV DQG UHTXHQF LHV. The output clock signal, generated internally with a non-PLL oscillator design, is compatible with LVDS logic levels. The device, available RQ WDSH DQG UHHO LV FRQWDLQHG LQ D 3.2mm surface-mount ceramic package.

Applications

- The LD Series is ideal for high-speed DSSOLFDWLRQV UHTXLULQJ ORZ MLWWHU LQFOXGLQJ
 - * LJDELW (WKHUQHW
 - *)LEUH&KDQQHO
- Serial Attached SCSI (SAS)
- Server & Storage platforms
- 621(76'+ OLQHFDUGV
- Passive Optical Network (PON) devices
- + ' 9LGR 6\ VWHPV

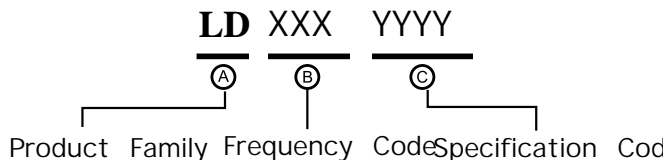
Package:



Pin Functions:

Pin	Function
1	OE or NC
2	NC or OE
3	Ground
4	Q Output
5	\bar{Q} Output
6	V _{CC}

Part Ordering Information:



)ROORZLQJ WKH DERYH IRUPDW 6DURQL[H&HUD SDUW QX
FRQILUPDWLRQ RI H[DFW FXVWRPHU UHTXLUHPHQWV

Electrical Performance

Parameter	Min.	Typ.	Max.	Units	Notes
Output Frequency	38.88		162	MHz	As specified
Supply Voltage	2.25	2.50	2.75	V	
Supply Current, Enabled		35	47	mA	
Supply Current, Disabled			0.03	mA	
Frequency Stability			±20 to ±50	ppm	See Note 1 below
Operating Temperature Range	-20		+70	°C	Commercial (standard)
	-40		+85		Industrial (standard)
Output Logic 0, V_{OL}	0.9	1.1		V	
Output Logic 1, V_{OH}		1.43	1.6	V	
Output Load	100Ω connected between both outputs				output requires termination
Duty Cycle	45		55	%	measured 50% of waveform
Rise and Fall Time		500	850	ps	measured 20/80% of waveform
Jitter, Phase		0.5	1	ps RMS (1-σ)	12kHz to 20MHz frequency band
Jitter, Total			25	ps pk-pk	100,000 random periods

Notes:

- Stability includes all combinations of operating temperature, load changes, rated input (supply) voltage changes, initial calibration tolerance (25°C), aging (5 year at 40°C average effective ambient temperature), shock and vibration.
- For specifications other than those listed, please contact sales.

Output Enable / Disable Function

Parameter	Min.	Typ.	Max.	Units	Notes
Input Voltage (pin OE), Output Enable	0.7			V	or open
Input Voltage (pin OE), Output Disable (low power standby)			0.3	V	Output disabled to Hi-Z
Internal Pullup Resistance	50			kΩ	
Output Disable Delay			200	ns	
Output Enable Delay			10	ms	

Absolute Maximum Ratings

Parameter	Min.	Typ.	Max.	Units	Notes
Storage Temperature	-55		+125	°C	

For the latest product information visit: [KWWS](#) [ZZZ](#) [SHULFRP](#) [FRP](#) [SURGXFWV](#) [WLPLOJ](#) [RVFLOODWR](#)

For test circuit go to [KWWS](#) [ZZZ](#) [SHULFRP](#) [FRP](#) [SGI](#) [VUH](#) [WFBOYGV](#) [SGI](#)

For soldering reflow profile and reliability test ratings go to: [KWWS](#) [ZZZ](#) [SHULFRP](#) [FRP](#) [SGI](#) [VUH](#) [UHIORZ](#) [SGI](#)

For tape and reel information go to: [KWWS](#) [ZZZ](#) [SHULFRP](#) [FRP](#) [SGI](#) [VUH](#) [WUB](#) [B\[R](#) [SGI](#)