

DLL

LVDS THRU-HOLE CRYSTAL CLOCK OSCILLATOR

FEATURES

- Thru-hole DIL 14 package
- Reduced jitter design without PLL and multiplier circuit
- Superior phase noise
- Many options available
- Applications : SONET, xDSL, SDH, Set-top box, ...

20.7 x 13.1 x 5.08 mm

20.7 x 13.1 x 7.48 mm



Item	Specification		
Frequency Range	0.75 MHz ~ 800 MHz		
Standard frequencies	76.8 ; 77.760 ; 81.92 ; 100 ; 122.880 ; 125 ; 150 ; 155.52 ; 156.25 MHz 184.32 ; 245.76 ; 250 ; 300 ; 311.04 ; 312.5 ; 320 ; 340 ; 400 ; 491.520 ; 622.080 MHz		
Output Logic	LVDS		
Overall Frequency Stability*	± 20 ppm ~ ± 100 ppm (see options)		
Operating Temperature Range	0 ~ +70 °C commercial application (see options) -40 ~ +85 °C industrial application (see options)		
Supply Voltage Vdd	+3.3 V ±5%		
Supply Current Idd	70 mA max		
Output Voltage HIGH VOH	1.43 V typ. ; 1.6 V max.		
Output Voltage LOW VOL	1.1 V typ. ; 0.9 V min.		
Output Load	50 ohm from each output		
Symmetry	45 / 55%		
Rise Time/Fall Time Fr/Ff	0.3 ns typ. ; 1.0 ns max.		
Start-up Time	3 ms typ. ; 10 ms max.		
Integrated Phase Jitter (12 kHz to 20 MHz band)	1 ps max		
Phase Noise (typical)	Offset	Frequency 122.880Mhz	Frequency 622.080Mhz
	10 Hz	-73 dBc / Hz	-64 dBc / Hz
	100 Hz	-100 dBc / Hz	-100 dBc / Hz
	1 kHz	-125 dBc / Hz	-132 dBc / Hz
	10kHz	-145 dBc / Hz	-138 dBc / Hz
100kHz	-150 dBc / Hz	-140 dBc / Hz	
Packing Unit	100 pcs / box		
	Customer specifications on request		

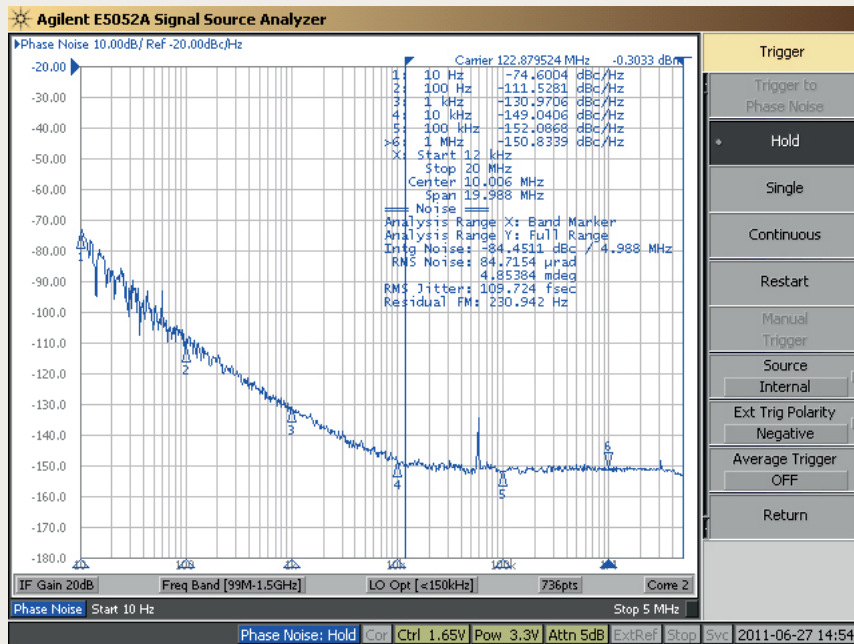
(*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging.

OPTIONS & ORDERING INFORMATION

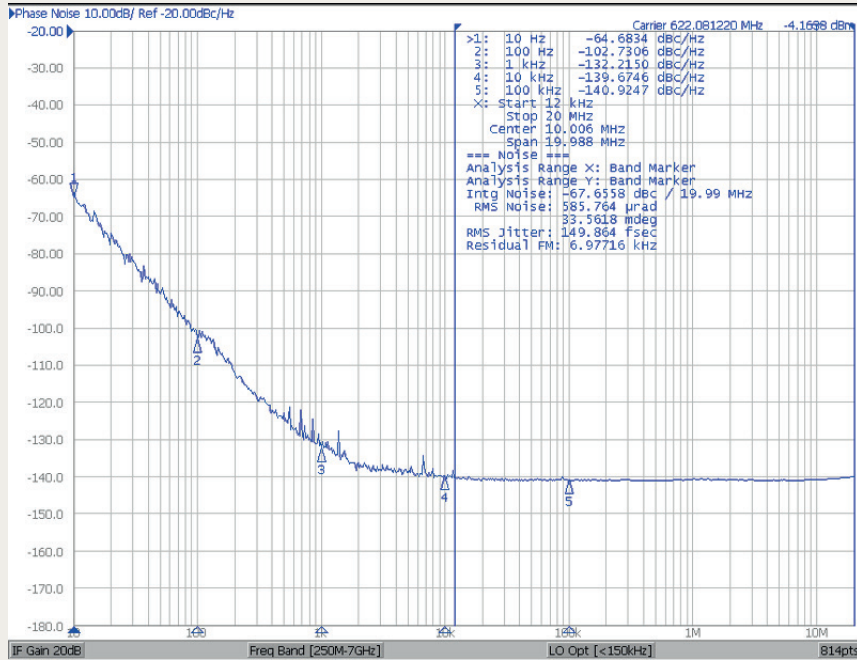
..... MHz
Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Package height	Frequency in MHz
33 = +3.3V	C = 0°/+50°C D = -10°/+60°C E = 0°/+70°C F = -20°/+70°C G = -30°/+75°C H = -30°/+85°C K = -40°/+85°C	20 = ±20 ppm 25 = ±25 ppm 30 = ±30 ppm 50 = ±50 ppm 100 = ±100 ppm	F = no Tri-state	H1 = 5.08 mm H2 = 7.48 mm	Please specify the frequency in MHz

* Note : Not all combinations are possible, please consult us.

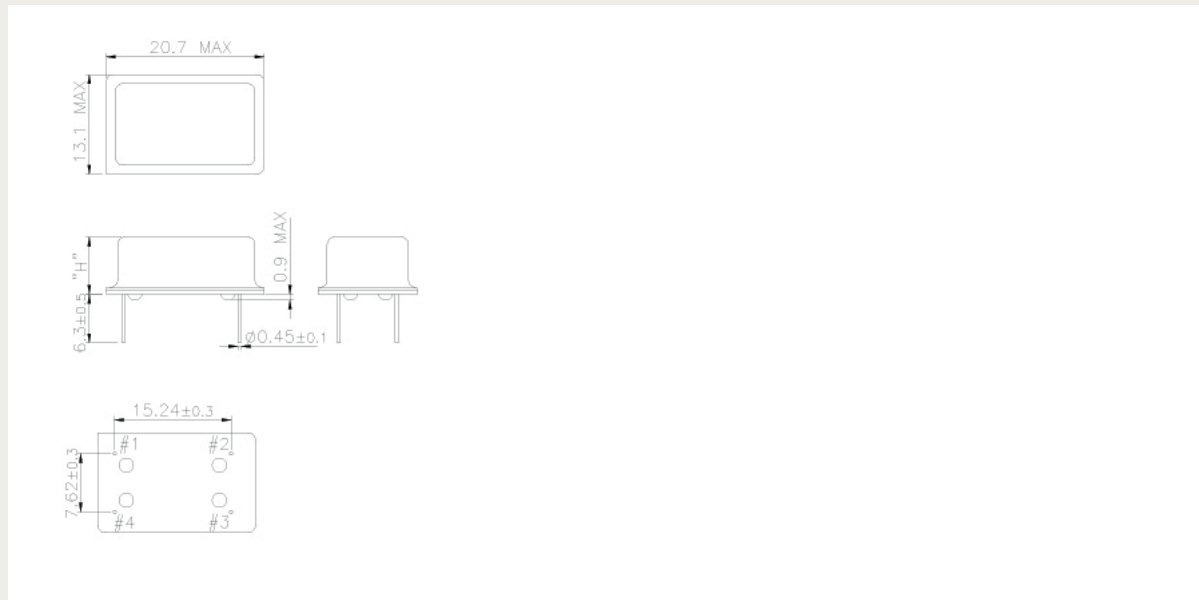
PHASE NOISE (122.880 Mhz)



PHASE NOISE (622.080 Mhz)



OUTLINE DIMENSIONS (mm)



Pin Connections #1: Complementary output #2: GND #3: Output #4: Vdd