



Features and Benefits

10.0 MHz to 1450 MHz operating frequency range for 3.3V supply
18 mA typical
Less than +/- 25 ppm over -40C to +85C
LVDS outputs
7.0 x 5.0 x 1.8 mm smd
3.3V supply voltage
600 fs typical phase jitter

Typical Applications

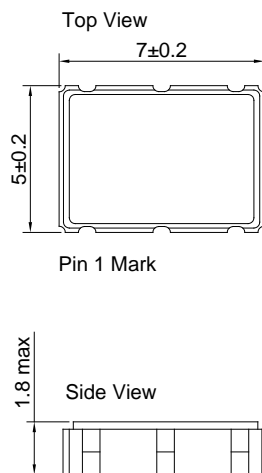
Telecom Networks
Data Communications

Description

The XPF7500R series with LVDS outputs utilizes a low noise configurable IC technology to deliver output frequencies with up to six significant digits past the decimal point.

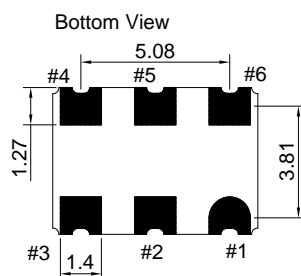
Mechanical Drawing & Pin Connections

Drawing No: MD150071-1

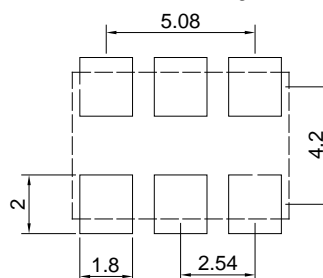


PIN	Function
PAD #1	Tri-State
PAD #2	N/C
PAD #3	GND
PAD #4	Output
PAD #5	Complimentary
PAD #6	Supply Voltage

Unit : mm



Recommended Soldering Pattern





Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F_{nom}			212.5		MHz	
Output Wave Form			LVDS				
Output Voltage Level "1"			1.4		1.6	V	
Output Voltage Level "0"			0.9		1.1	V	
Output Load			Differential				
Duty Cycle			45	50	55	%	
Rise and Fall Times		20%<-->80% of the PECL wave form		0.2	0.4	nSec	
Start Time					10	mSec	
Output Enable Time/Disable Time					50/200	ns	
Integrated Phase Jitter		12KHz to 20MHz		0.6		ps	
Tri-State Function		0.7% of $V_{DD}(\text{min.})$ or no connection to enable output LVCMOS/LVTTL level					
		0.3% of $V_{DD}(\text{max.})$ to disable output (high impedance) LVCOMS/LVTTL level					
Power Supply							
Supply Voltage	V_{cc}		3.135	3.3	3.465	V	
Supply Current				18		mA	
Frequency Stability							
Vs. Temperature		From -40°C to +85°C			+/-25	ppm	
Aging		First year			+/-2	ppm	
		Over 10 years			+/-10	ppm	
Phase Noise							
Phase Noise		@10Hz		-53		dBc/Hz	
		@100Hz		-86		dBc/Hz	
		@1KHz		-109		dBc/Hz	
		@10KHz		-118		dBc/Hz	
		@100KHz		-121		dBc/Hz	
		@1MHz		-133		dBc/Hz	
Phase Jitter		@10MHz		-151		dBc/Hz	
		12KHz to 20MHz RMS		0.6		ps	
Environmental Conditions							
Parameter	Reference Std.			Test Condition			
Operating Temperature range	-40°C to +85°C						
Storage Temperature range	-55°C to +150°C						