



Features and Benefits

Frequency range: 15-2100MHz
Output: LVPECL
Supply voltage: 3.3V
Current: 110mA Max.
Frequency stability vs. temperature: ± 50 PPM
Operating temperature: -10°C to $+60^{\circ}\text{C}$
Size: 2.5x2x1mm
Package type: SMD

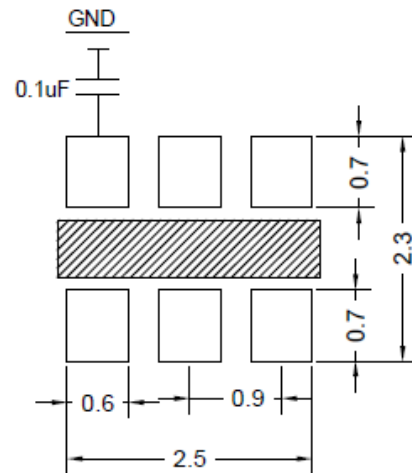
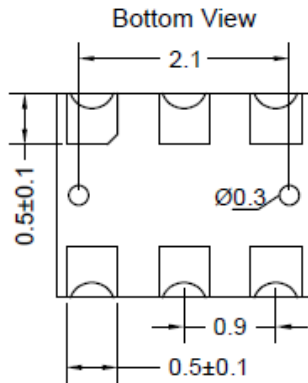
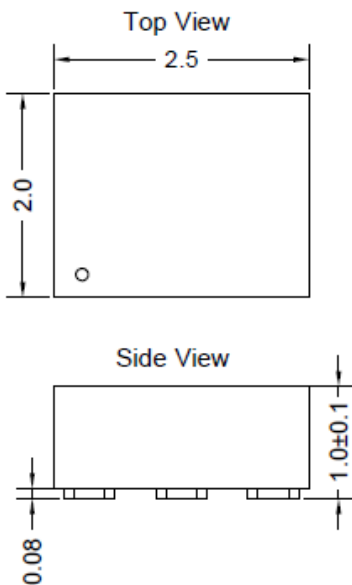


Typical Applications

Defense Systems
Mobile Radar Station
Gigabit Ethernet, SONET/SDH
Server & Storage, Data Center
SD/HD Video, FPGA Clock Generation

Mechanical Drawing & Pin Connections

Drawing No: MD240070-1



PIN	Function
#1	Control Voltage
#2	OE
#3	GND
#4	OUTPUT
#5	OUTPUT_N
#6	Supply Voltage

Please keep the middle area blank.
Do not layout any lines in this space.
To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vcc and GND pads

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f ₀		15		2100	MHz	
RF Output							
Output Waveform			LVPECL				
Output Level		Output high	V _{cc} -1.165		V _{cc} -0.8	V	
		Output low	V _{cc} -2.0		V _{cc} -1.55	V	
Duty Cycle			45		55	%	
Rise & Fall Time					0.35	ns	
Startup Time					8	ms	
Tri-State (Input to Pin2)		Enable	0.7 V _{cc}			V	
		Disable			0.3 V _{cc}	V	
Power Supply							
Voltage	V _{cc}	±10%		3.3		V	
Supply Current		V _{cc} =3.3V			110	mA	
Stand by Current		V _{cc} =3.3V			110	mA	
Control Voltage							
Control Voltage	V _c	V _{cc} =3.3V	0.3	1.65	3	V	
Pulling Range			±50		±250	ppm	
Linearity					±10	%	
Modulation Bandwidth			5		20	KHz	
V _c Input Impedance			5			Mohm	
Frequency Stability							
Versus Temperature					±50	ppm	
Phase Noise At V _{cc} =3.3V, 873.515MHz Frequency		1KHz		-106		dBc/Hz	
		10KHz		-115			
		100KHz		-123			
		1MHz		-133			
RMS Phase Jitter		Integrated 12KHz-20MHz	150		300	fs	
Period Jitter					50	ps	
Environmental Conditions							
Operating temperature range			-10°C to +60°C				