



Features and Benefits

Frequency range: 15-2100MHz
Output: CML
Supply voltage: 1.8V
Current: 70mA Max.
Frequency stability vs. temperature: ± 100 PPM
Operating temperature: -40°C to $+85^{\circ}\text{C}$
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

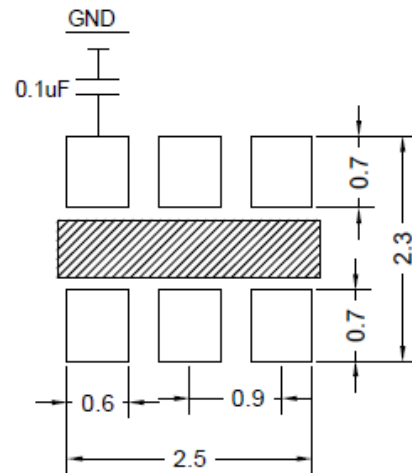
Mechanical Drawing & Pin Connections

Drawing No: MD240070-1



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

Unit in mm
1mm = 0.0394 inches



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 0.1 μF as close to the part as possible between Vcc and GND pads



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note	
			Min.	Typ.	Max.			
Operational Frequency	f ₀		15		2100	MHz		
RF Output								
Output Waveform			CML					
Output Level		Output high	V _{cc} -0.085		V _{cc}	V		
		Output low	V _{cc} -0.6		V _{cc} -0.32	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%		1.8		V		
Supply Current		V _{cc} =1.8V			70	mA		
Stand by Current		V _{cc} =1.8V			70	mA		
Control Voltage								
Control Voltage	V _c	V _{cc} =1.8V	0.18	0.9	1.62	V		
Pulling Range			±50		±250	ppm		
Linearity					±10	%		
Modulation Bandwidth			5		20	KHz		
V _c Input Impedance			5			Mohm		
Frequency Stability								
Versus Temperature					±100	ppm		
Phase Noise At V _{cc} =3.3V, 805.664MHz Frequency		1KHz		-107		dBc/Hz		
		10KHz		-117				
		100KHz		-125				
		1MHz		-135				
RMS Phase Jitter		Integrated 12KHz-20MHz	150		300	fs		
Period Jitter					50	ps		
Environmental Conditions								
Operating temperature range			-40°C to +85°C					