



**Features and Benefits**

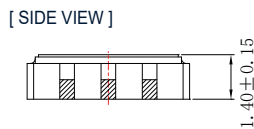
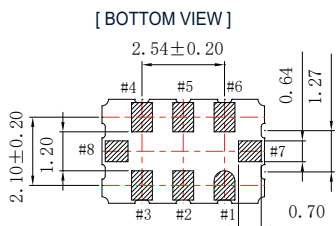
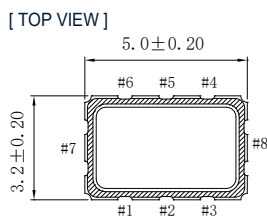
Low Power Supply Voltage: 3.3, 2.5, 1.8V supply options  
 Clock Output: LVDS  
 Output frequency support from 15MHz to 2.1GHz  
 Ultra Low Noise, Phase Jitter < 300 fs  
 (Typical: 150 fs at 12kHz to 20MHz frequency offsets)  
 Tri-state enable / disable mode.  
 Temperature Range: -40°C to +85°C  
 Pb-free/RoHS Compliant

**Typical Applications**

SONET/SDH,. Gigabit Ethernet.  
 Storage Area Networking (SAN)  
 SD/HD video  
 FPGA clock generation

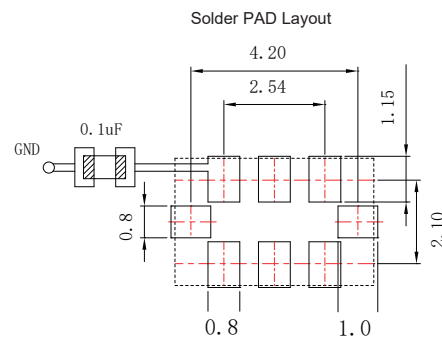
**Mechanical Drawing & Pin Connections**

**Drawing No: MD200027-1**



PIN#	FUNCTION
1	LVPECL/LVDS/CML/HCSL
2	NC
3	OE
4	GND
5	Output
6	Comp. Output
7	VDD
8	NC

Unit in mm  
 1mm = 0.0394 inches





**Specifications**

Specification	Condition	3.3V		2.5V		1.8V		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation	V <sub>DD</sub> ±5%	-	-	-	-	1.71	1.89	V
Supply Voltage Variation	V <sub>DD</sub> ±10%	3.63	2.97	2.25	2.75	-	-	V
Frequency Range		15	2100	15	2100	15	2100	MHz
Standard Frequency		100, 106.25, 125, 156.25, 187.5, 200, 212.5, 266, 300, 312.5, 400, 491.52, 622.08, 644.531250						MHz
Supply Current		-	90	-	80	-	70	mA
Duty Cycle		45	55	45	55	45	55	%
Output Level	Output High	-	1.6	-	1.6	-	1.6	V
	Output Low	0.9	-	0.9	-	0.9	-	
Transition Rise/Fall Time	20%-80%	-	0.35	-	0.35	-	0.35	nSec
Start Time		-	8	-	8	-	8	mSec
Tri-State(Input to Pin2)	Enable	0.7xV <sub>DD</sub>	-	0.7xV <sub>DD</sub>	-	0.7xV <sub>DD</sub>	-	V
	Disable	-	0.3xV <sub>DD</sub>	-	0.3xV <sub>DD</sub>	-	0.3xV <sub>DD</sub>	
Standby Current		-	90	-	80	-	70	mA
RMS Phase Jitter (12KHz to 20MHz)		150	300	150	300	150	300	fs
Period Jitter		-	50	-	50	-	50	ps
Phase Noise, At V <sub>DD</sub> =3.3V, f <sub>out</sub> =873.515MHz		TYP	MAX	TYP	MAX	TYP	MAX	
	1KHz offset	-106	-	-106	-	-106	-	dBc/Hz
	10KHz offset	-115	-	-115	-	-115	-	dBc/Hz
	100KHz offset	-123	-	-123	-	-123	-	dBc/Hz
	1MHz offset	-133	-	-133	-	-133	-	dBc/Hz
	10MHz offset	-150	-	-150	-	-150	-	dBc/Hz

**Frequency Stability vs. Temperature**

	±20PPM	±25PPM	±30PPM	±50PPM
-20°C to +70°C	Conditional	Available	Available	Available
-40°C to +85°C	Not Available	Conditional	Available	Available

Note: Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging (1<sup>st</sup> year), shock and vibration.