



### Features and Benefits

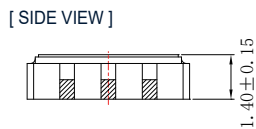
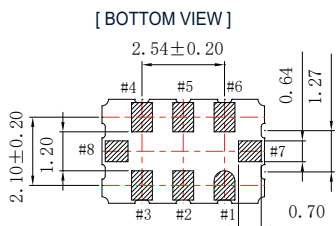
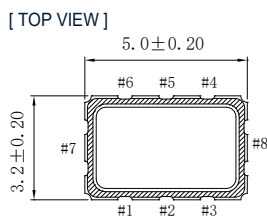
- Low Power Supply Voltage: 3.3, 2.5, 1.8V supply options
- Clock Output: HCSL
- Output frequency support from 15MHz to 700MHz
- Ultra Low Noise, Phase Jitter < 300 fs
- (Typical: 150 fs at 12kHz to 20MHz frequency offsets)
- Tri-state enable / disable mode.
- Temperature Range: -40°C to +85°C
- Pb-free/RoHS Compliant

### Typical Applications

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

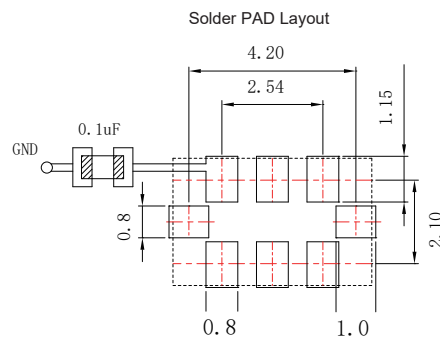
### Mechanical Drawing & Pin Connections

Drawing No: **MD200027-1**



PIN#	FUNCTION
1	LVPECL/LVDS/CML/HCSL
2	OE
3	GND
4	Output
5	Comp. Output
6	VDD
7	NC
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> ±10%	3.63	2.97	2.25	2.75	1.71	1.89	V
Frequency Range		15	700	15	700	15	700	MHz
Supply Current		-	115	-	100	-	94	mA
Duty Cycle		45	55	-	55	45	55	%
Output Load		50ohm to GND						
Output Level	Output High	0.66	1.15	0.66	1.15	0.66	1.15	V
	Output Low	0	0.15	0	0.15	0	0.15	
Transition Rise/Fall Time	20%-80%	-	0.4	-	0.4	-	0.4	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	-	0.3x V <sub>DD</sub>	-	0.3xV <sub>DD</sub>	-	0.3xV <sub>DD</sub>	
Standby Current		-	115	-	100	-	94	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	-87	-	-87	-	-87	-	dBc/Hz
	10KHz offset	-110	-	-110	-	-110	-	dBc/Hz
	100KHz offset	-127	-	-127	-	-127	-	dBc/Hz
	1MHz offset	-138	-	-138	-	-138	-	dBc/Hz
	10MHz offset	-153	-	-153	-	-153	-	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.