

SOC7 SMD Clock Oscillator

LVPECL/LVDS

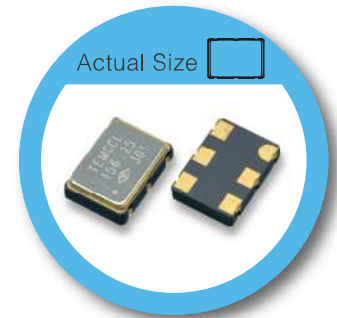
SHOULDER

FEATURE

- Typical 7.0 x 5.0 x 1.75 hermetically sealed ceramic package
- Very low phase jitter : < 1 ps(0.6 ps, typ.) RMS
- Any frequency between 8 MHz and 1500 MHz.
- Tri-state enable/disable
- Fast deliver

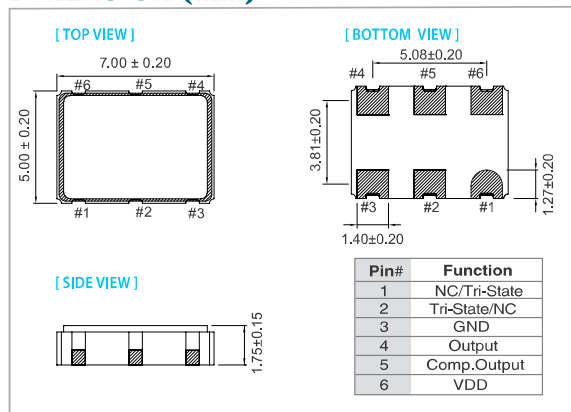
TYPICAL APPLICATION

- High-Speed Gigabit Ethernet, Fiber Channel, Storage Area Network, SONET
- Enterprise Server, SAS/SATA
- Microprocessors/DSP/FPGA
- Broadband Access
- Smart Grid

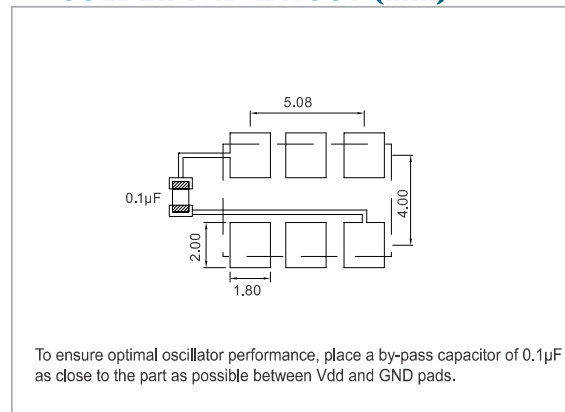


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	LVPECL				LVDS				unit
	3.3 V		2.5 V		3.3 V		2.5 V		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) ±5%	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V
Frequency Range	8	1500	8	1500	8	1500	8	1500	MHz
Standard Frequency	106.25, 125, 133.33, 150, 155.52, 156.25, 187.5, 212.5, 312.5, 622.08								
Supply Current 8 MHz ≤ Fo ≤ 1500 MHz	—	50	—	50	—	50	—	50	mA
Output Level Output High (Logic "1")	2.275	—	1.475	—	—	1.6	—	1.6	V
Output Low (Logic "0")	—	1.68	—	0.88	0.9	—	0.9	—	
Transition Time: Rise/Fall Time ⁺	—	1.0	—	1.0	—	1.0	—	1.0	nSec
Start Time	—	10	—	10	—	10	—	10	mSec
Tri-State(Input to Pin 2 or Pin 1)									
Enable (High voltage or floating)	2.31	—	1.75	—	2.31	—	1.75	—	V
Disable (Low voltage or GND)	—	0.99	—	0.75	—	0.99	—	0.75	
RMS Phase Jitter (Integrated 12 KHz ~ 20 MHz)	—	1	—	1	—	1	—	1	pSec
Phase Noise @ 156.25 MHz	100Hz		-94		-94		-94		dBc/Hz
	1 kHz		-113		-113		-112		
	10 kHz		-122		-122		-122		
Aging (@ 25°C 1st year)	—	±3	—	±3	—	±3	—	±3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	-55	125	°C

+ Transition times are measured between 20% and 80% of VDD.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	
	±25	±50
-10 ~ +60	○	○
-20 ~ +70	○	○
-40 ~ +85	△	○

* ○ : Available △:Conditional X: Not available

* Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration

Note: not all combination of options are available. Other specifications may be available upon request.
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