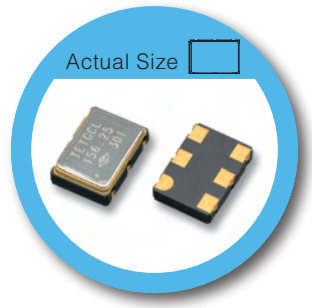
7.0 x 5.0 mm SMD PECL/LVDS Crystal Oscillator – OT Type



RoHS Compliant Standard

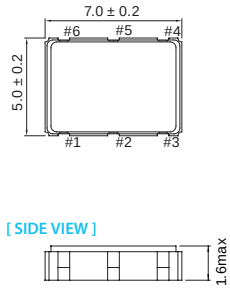
FEATURE

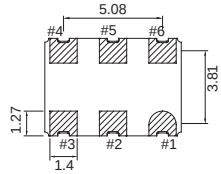
- Typical 7.0 x 5.0 x 1.5 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Complementary output.
- Output frequency up to 320 MHz.
- Packing: Tape & Reel, 1000/3000pcs per Reel.

TYPICAL APPLICATION

- 10G-BIT, Ethernet, MAN, SONET
- WLAN/WiMax, xDSL
- Fiber Channel

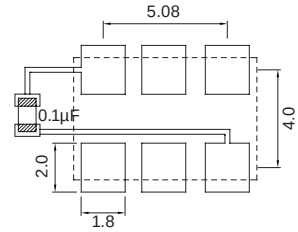
DIMENSION (mm)





Pad	Function	
#1	NC	Tri-State
#2	Tri-State	NC
#3	GND	
#4	Output	
#5	Comp. Output	
#6	VDD	

SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	PECL 3.3 V Min.	PECL 3.3 V Max.	PECL 2.5 V Min.	PECL 2.5 V Max.	LVDS 3.3 V Min.	LVDS 3.3 V Max.	LVDS 2.5 V Min.	LVDS 2.5 V Max.	unit
Supply Voltage Variation (VDD) 5%	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V
Frequency Range	19.44	320	19.44	320	19.44	320	19.44	320	MHz
Standard Frequency	77.76, 106.25, 125, 155.52, 156.25, 187.5, 212.5, 312.5								
Supply Current 19.44 MHz ≦ Fo < 160 MHz	–	75	–	75	–	50	–	50	mA
160 MHz ≦ Fo < 250 MHz	–	100	–	100	–	50	–	50	
250 MHz ≦ Fo ≦ 320 MHz	–	100	–	100	–	65	–	65	
Output Level Output High (Logic "1")	2.275	–	1.475	–	–	1.6	–	1.6	V
Output Low (Logic "0")	–	1.68	–	1.095	0.9	–	0.9	–	
Transition Time: Rise/Fall Time+	–	1.0	–	1.0	–	1.0	–	1.0	nSec
Start Time	–	3	–	3	–	3	–	3	mSec
Tri-State(Input to Pin 2 or Pin 1)									
Enable	0.7 VDD	–	0.7 VDD	–	0.7 VDD	–	0.7 VDD	–	V
Disable	–	0.3 VDD	–	0.3 VDD	–	0.3 VDD	–	0.3 VDD	
RMS Phase Jitter (Integrated 12 KHz ~ 20 MHz)									
Fo < 80 MHz	–	1.3	–	1.3	–	1.3	–	1.3	pSec
80 MHz ≦ Fo <125 MHz	–	0.9	–	0.9	–	0.9	–	0.9	
125 MHz ≦ Fo <150 MHz	–	0.7	–	0.7	–	0.7	–	0.7	
150 MHz ≦ Fo <200 MHz	–	0.5	–	0.5	–	0.5	–	0.5	
200 MHz ≦ Fo	–	0.3	–	0.3	–	0.3	–	0.3	
Aging	–	±3	–	±3	–	±3	–	±3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
+ 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

Specifications subject to change without notice.

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