

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package LVDS Ultra Low Phase Jitter RoHS Compliant Tape and Reel 	<ul style="list-style-type: none"> Fiber Channel Gigabit Ethernet PCI Express



PART NUMBERING GUIDE

SUNTSU ULTRA LOW JITTER OSC → **SUO 75 L 3 A 48 1 - 155.520M** ← FREQUENCY (MHz)

7.0mm x 5.0mm

LVDS

SUPPLY VOLTAGE
3: 3.3V±5%

FREQUENCY STABILITY
A: ±50ppm
B: ±30ppm
C: ±25ppm
*D: ±20ppm

TRI-STATE (ENABLE/DISABLE)
BLANK: NO E/D
1: Pin 1

OPERATING TEMPERATURE RANGE
07: 0°C to +70°C
16: -10°C to +60°C
17: -10°C to +70°C
27: -20°C to +70°C
38: -30°C to +85°C
48: -40°C to +85°C

Cage Code: 4GUT4
To customize your parameters contact a Suntzu representative.
* For frequency stability option D contact a Suntzu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	80		170	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-20		+20	See part numbering guide for options.
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature		-55		+125	
Supply Voltage (V _{DD})	V	3.135	3.3	3.465	
Current (I _{DD})	mA			65	
Output Load (LVDS)	Ω			100	
Output Logic Levels	Output Logic High (V _{OH})		1.43	1.6	
	Output Logic Low (V _{OL})		0.9	1.1	
Differential Output Voltage (V _{OD})	mV	247	330	454	
Differential Output Error (ΔV _{OD})	mV			50	
Offset Voltage (V _{OS})	V	1.125	1.250	1.375	
Offset Error (ΔV _{OS})	mV			50	
Rise (T _R) and Fall (T _F) Time	ns		0.4	0.8	
Symmetry (Duty Cycle)	%	45	50	55	
Tri-State Input Voltage	Enable	V	0.7*V _{DD}		No Connection.
	Disable			0.3*V _{DD}	
Start-Up Time	ms			10	
Phase Jitter (12kHz ~ 20MHz)			0.077	0.1	150MHz~170MHz
			0.13	0.2	80MHz ~149MHz

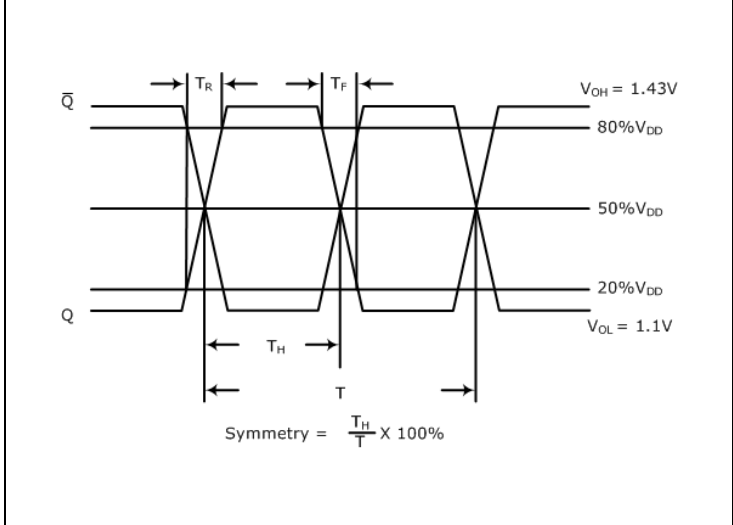
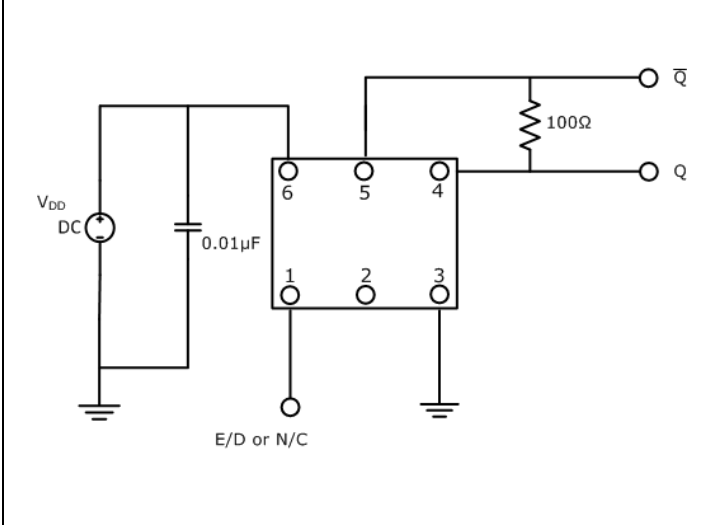
OUTLINE DRAWING

RECOMMENDED LAND PATTERN

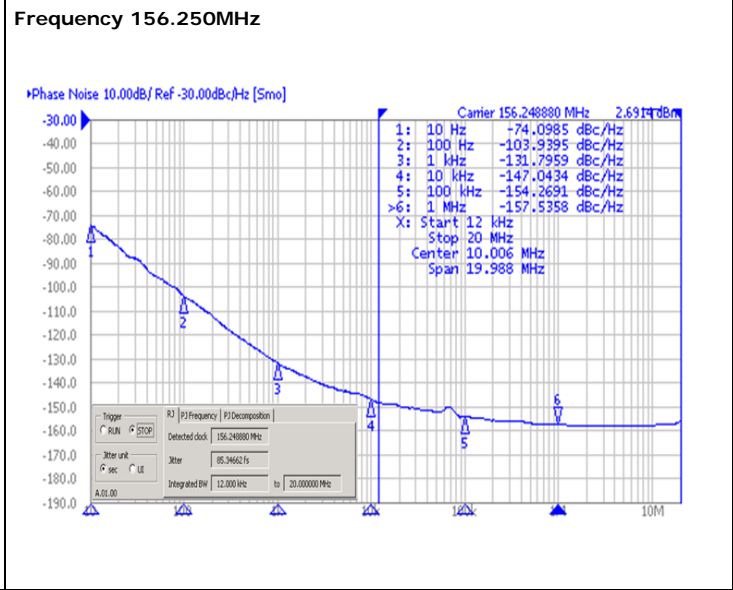
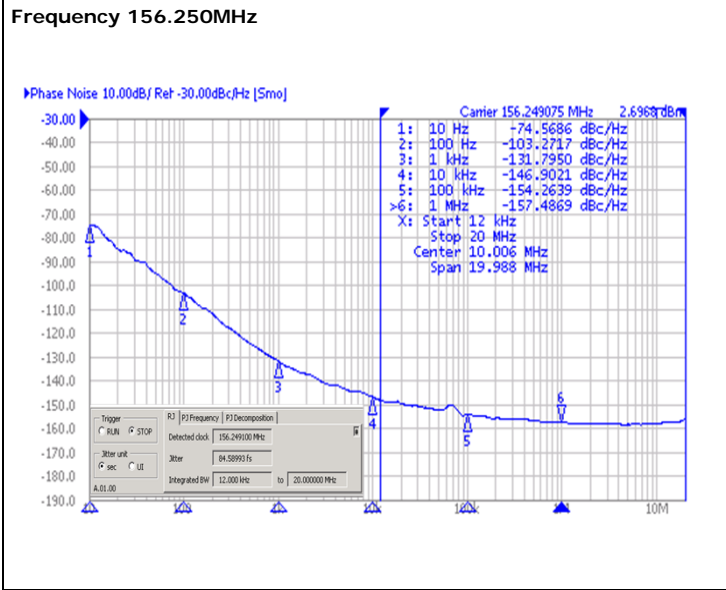
PIN	FUNCTION
1	TRI-STATE or NC
2	NC
3	GND
4	OUTPUT
5	COMP OUTPUT
6	V _{DD}

NOTE: Dimensions in millimeters (mm).

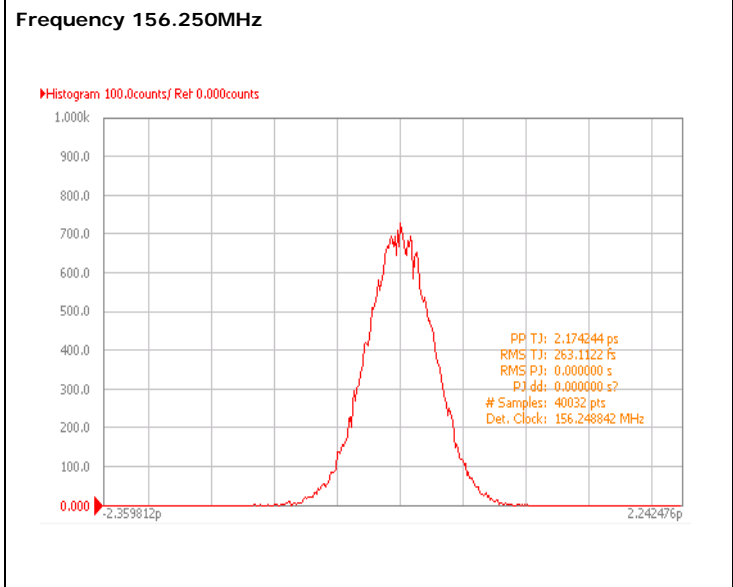
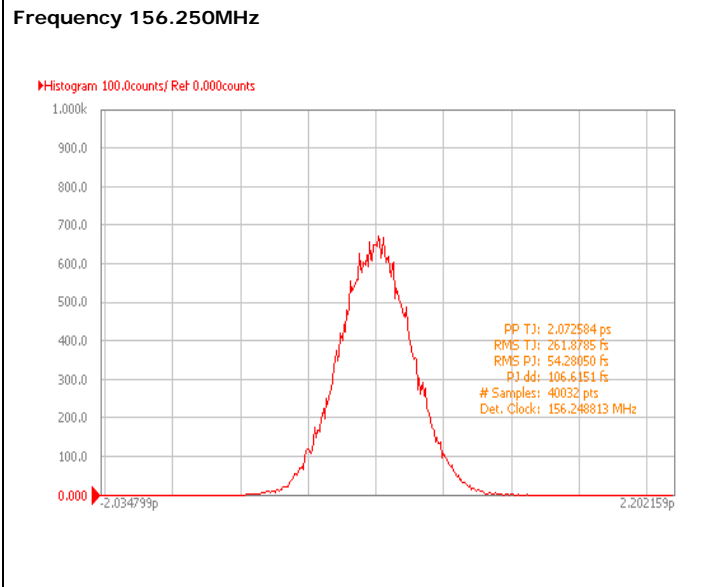
TEST CIRCUIT (LVDS) WAVEFORM (LVDS)



TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGILENT E5052A)



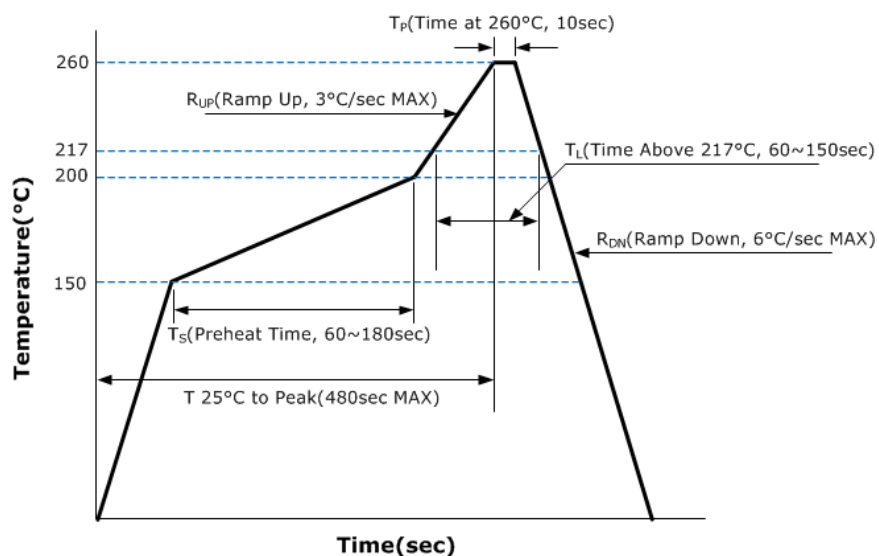
TYPICAL JITTER PERFORMANCE (MEASURED BY AGILENT E5052A)



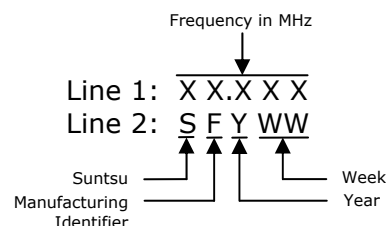
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003

REFLOW PROFILE

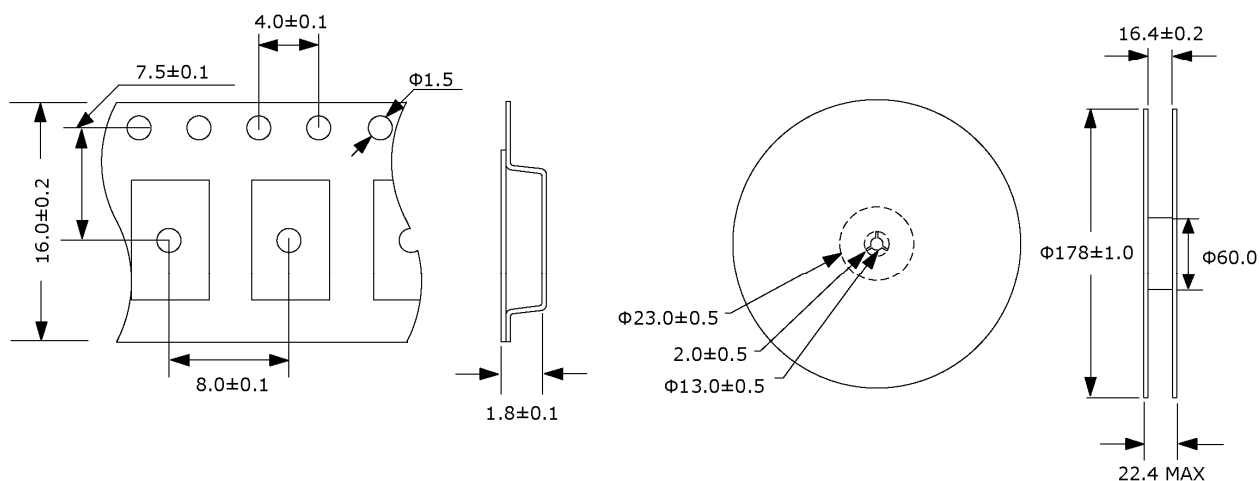


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.

REVISION RECORD			
Rev. Number	Revision Description	Rev. Date	Manufacturing Identifier
Rev. 01	Initial release	Sep. 30, 2016	K