DESCRIPTION

The SOC5 SMD Clock Oscillator has a small size for many applications, large temperature range available, complementary output available, enable disable function available, different designs depending on customers requirements

ELECTRICAL SPECIFICATION

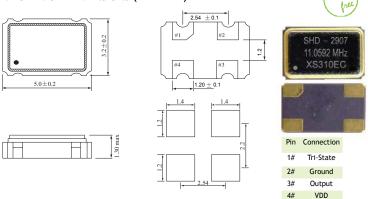| Frequency Range (Fo)		10.00 to 80.000MHz	
Frequency Stability (all conditions)		±20ppM to ±100ppM Maximum	
Operating Temperature Range		0°C to +70°C Standard (or Optional)	
Storage Temperature Range		-55°C to +125°C	
Input Voltage (V_{DD})		5V ±10% or 3.3V ±10%	
Output Voltage	V_{OH}	90% V_{DD} Minimum	
	V_{OL}	10% V_{DD} Maximum	
Rise Time (tr)	10% V_{DD} ~ 90% V_{DD}	10ns (1.00 to 23.99MHz)	
Fall Time (tf)	90% V_{DD} ~ 10% V_{DD}	6ns (24.00 to 100.00MHz)	
Tri-State (Pin 1)	ON (Low Level)	High Impedance at Pin 3	
	OFF (High Level or Open)	Output Active at Pin 3	
Output Symmetry 1/2 V_{DD}	A	40 / 60%	
	B	45 / 55%	
	C	47.5 / 52.5%	
Low Voltage		0.5V (10% V_{DD})	
High Voltage		4.5V (90% V_{DD})	
Aging (at 25°C)		±3ppM per year	
Output Load		CL=15pF / 1-10LS TTL	

Wired oscillators can be processed manually or in solder wave. Oscillators with SMD-connections can be processed in convenction, infrared or vapour phase soldering procedure, however, not over the head.

In solder machine mounted crystal or crystal oscillator can get a frequency offset which relaxes only after a view days, type depending.
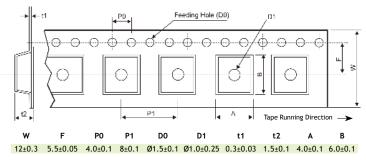
A storage under normal climate conditions (+5°C to +35°C and 40% to 75% a relative humidity) ensures a sufficient solderability of minimum 1 year. The solderability is typically still guaranteed beyond it.

Should the occasion of a long storage arise it has to be rechecked. For corresponding soldering profiles please refer to IEC 61760-1.
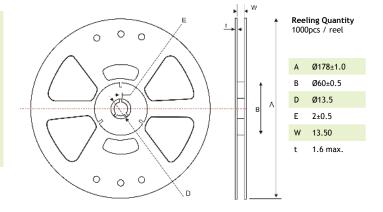
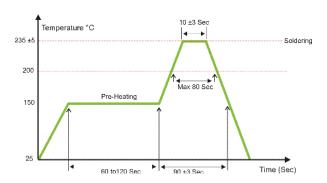## SOLDERING

MECHANICAL DIMENSIONS (all in mm)

Pin	Connection
1#	Tri-State
2#	Ground
3#	Output
4#	VDD

TAPE SPECIFICATIONS (all in mm) - Carrier Tape Dimensions

W	F	P0	P1	D0	D1	t1	t2	A	B
12±0.3	5.5±0.05	4.0±0.1	8±0.1	Ø1.5±0.1	Ø1.0±0.25	0.3±0.03	1.5±0.1	4.0±0.1	6.0±0.1

All temperature refer to topside of the package, measured on the package body surface

Reeling Quantity
1000pcs / reel

A	Ø178±1.0
B	Ø60±0.5
D	Ø13.5
E	2±0.5
W	13.50
t	1.6 max.

PART NUMBERING SYSTEM (Example)

SOC5-11.0592-20-3.3-A-C-XX

Hold Type
SOC5 / SOC3 / SOC7

Nominal Frequency (MHz)
Enter the nominal frequency (3 digits after dot) or up to last significant digit different than zero)

Frequency Stability (± ppm)

Input Voltage
3.3=3.3V
5=5.0V

Output Symmetry
A=40/60%
B=45/55%
C=47.5/52.5%

Operating Temperature Range (°C)
A= -20°C to 70°C
B= -10°C to 60°C
C= 0°C to 70°C
D= -30°C to 80°C
E= -40°C to 85°C

Options (can be blank)
S= Standard
X= Additional Specifications
T= Tape and Reel

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