

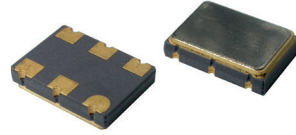
# SX7EK

# LVPECL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

## FEATURES

- Standard miniature package
- Ultra-low Jitter, 0.2 ps typ.
- Wide Temperature Range
- NO PLL

7.0 x 5.0 x 1.8 mm



Item	Specification		
Frequency Range	13.5 MHz ~ 200 MHz		
Output Signal	LVPECL		
Overall Frequency Stability*	± 20 ppm ~ ± 100 ppm (see options)		
Operating Temperature Range	0 ~ +70°C commercial application (see options) -40 ~ +85°C industrial application (see options) -40 ~ +105°C industrial application (see options)		
Supply Voltage Vdd	+2.5V ±5%	+3.3V ±5%	
Supply Current Idd	30 mA typ. ; 50 mA max		
Output Voltage HIGH VOH	Vdd -1.03 V min. ; Vdd -0.6 V max		
Output Voltage LOW VOL	Vdd -1.85 V min. ; Vdd -1.6 V max		
Output Load	50 ohm to Vdd-2V		
Symmetry	45/ 55%		
Rise Time/Fall Time Fr/Ff	0.3 ns typ. , 0.5 ns max.		
Tri-state function	pin #1 = high or open pin #1 = low	pin #4 - #5 ==> oscillation pin #4 - #5 ==> high impedance	
Start-up Time	3 ms typ. ; 10 ms max.		
RMS Phase Jitter (12 kHz to 20 MHz)	0.2 ps typ. , 0.5 ps max		
Phase Noise (typical)	<b>Offset</b>	<b>Frequency:</b>	<b>100.000 MHz</b>
	10 Hz		-70 dBc / Hz
	100 Hz		-97 dBc / Hz
	1 kHz		-122 dBc / Hz
	10 kHz		-138 dBc / Hz
	100 kHz		-144 dBc / Hz
	1 MHz		-149 dBc / Hz
	10 MHz		-154 dBc / Hz
Packing Unit	1000pcs / reel		
Soldering Condition	260°C , 10 sec x2 max		
	<b>Customer specifications on request</b>		

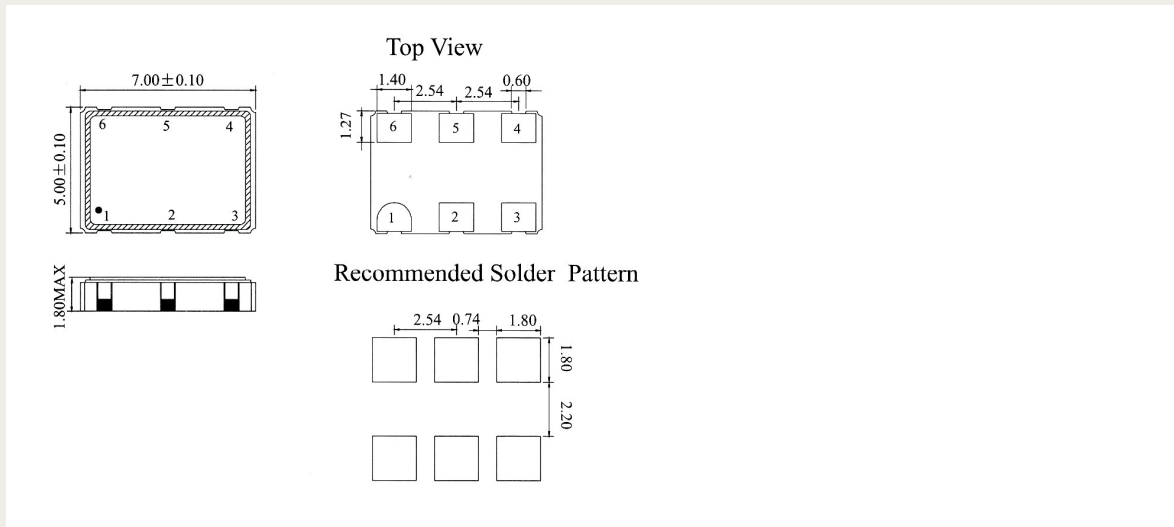
(\*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

## OPTIONS & ORDERING INFORMATION

SX7EK .....	.....	.....	..... -	..... MHz
Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Frequency in MHz
25 = +2.5V 33 = +3.3V	E = 0°/+70°C F = -20°/+70°C K = -40°/+85°C L = -40°/+105°C	20 = ±20 ppm 25 = ±25 ppm 30 = ±30 ppm 50 = ±50 ppm 100 = ±100 ppm	E = Tri-state	Please specify the frequency in MHz

\* Note : Not all combinations are possible, please consult us.

## OUTLINE DIMENSIONS (mm)



Pin Connections	#1 : E/D	#2 : NC	#3: GND	#4 : Output
	#5 : Complementary output	#6: Vdd		