

The ECS-327SMO oscillator utilizes the 32.768 KHz tuning fork crystal in a SMD ceramic package. It is designed specifically for wireless PCMCIA and portable communication equipment applications.

## FEATURES

- 2.0 mm low profile
- SMD version
- 3.3 V input voltage
- Tape & Reel (1000 pcs)

## PART NUMBERING GUIDE

PART NUMBER*
ECS-327SMO

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
OUTPUT FREQUENCY			32.768		KHz
FREQUENCY STABILITY	-10 ~ +60°C	-60		+30	PPM
FREQUENCY STABILITY	-40 ~ +85°C	-140		+30	PPM
OPERATING TEMPERATURE		-40		+85	°C
STORAGE TEMPERATURE		-40		+85	°C
INPUT VOLTAGE $V_{CC}$		+1.8V	+3.3V	+5.0V	V DC
INPUT CURRENT	with 15 pF load		8	15	μA
SYMMETRY	at 1/2 $V_{CC}$ level and +25°C	45/55		55/45	%
RISE AND FALL TIMES				200	ns
"0" LEVEL				$V_{CC} \times 0.1V$	
"1" LEVEL		$V_{CC} \times 0.9V$			
LOAD	CMOS			15	pF

## PACKAGE DIMENSIONS (mm)

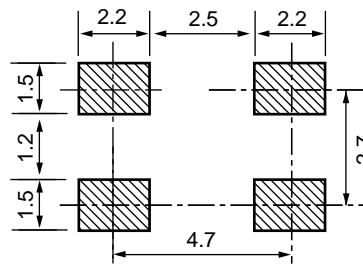
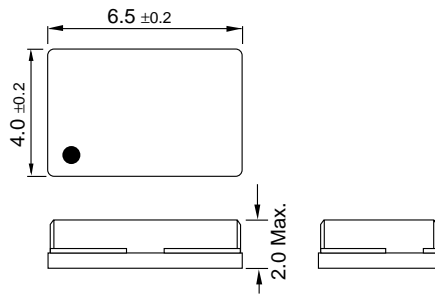


Figure 2) Land Pattern

PIN CONNECTIONS	
#1	NC
#2	GND
#3	OUTPUT
#4	$V_{CC}$

PACKAGE DATA	
COVER	METAL
BASE	CERAMIC
TERMINAL PLATING	GOLD

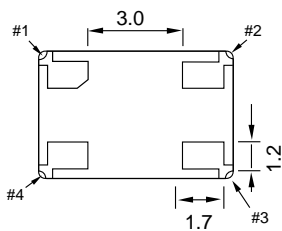
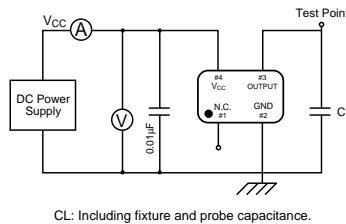


Figure 1) ECS-327SMO - Top, Bottom and Side views



CL: Including fixture and probe capacitance.

Figure 3) Test Circuit

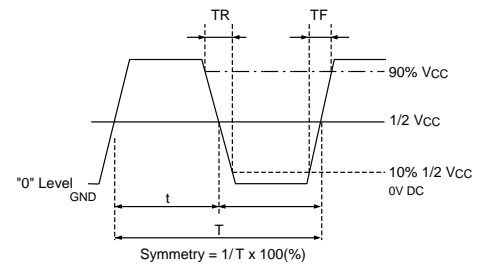


Figure 4) Output Wave Form