



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





- ▶ Low Current 1.5 μ A
- ▶ 3.2 x 2.5 mm Footprint
- ▶ 1.5 to 5.5V
- ▶ Pb Free/RoHS Compliant
- ▶ -40 ~ +85°C Operating Temp

ECS-327KE

SMD CLOCK OSCILLATOR

ECS-327KE 32.768 KHz low power CMOS subminiature SMD oscillator. Ideal for today's high density low power applications.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-327KE			UNITS
		MIN	TYP	MAX	
Frequency			32.768		KHz
Frequency Tolerance	VDD = +3.3V at +25°C	-10		+30	ppm
Frequency Stability	-20 ~ +70°C	-90		+30	ppm
	-40 ~ +85°C	-130		+30	ppm
Operating Temperature		-40		+85	°C
Storage Temperature		-55		+125	°C
Input Voltage		+1.5		+5.5	VDC
Absolute Supply Voltage		+1.5		+5.5	VDC
Input Current (-40~+85°C)	at VDD=+3.3V, no load			1.5	μ A
Standby Current (at +25°C)	No Load			250	nA
Output Symmetry	@ 50% VDD CL 15 pF @+25°C	40/60		60/40	%
Rise and Fall Times	CL 15 pF @+25°C (10% to 90% VDD)			200	ns
"0" level (VOL)	CL 15 pF @ +25°C			+0.4	VDC
"1" level (VOH)	CL 15 pF @ +25°C	VDD-0.4V			VDC
Output Load	CMOS			15	pF
Disable delay time				100	nS
Enable delay time	VDD = +3.3V @ +25°C			1	S
Startup time				1	S
Aging (first year)	@ +25°C \pm 3°C			\pm 5	ppm

DIMENSIONS (mm)

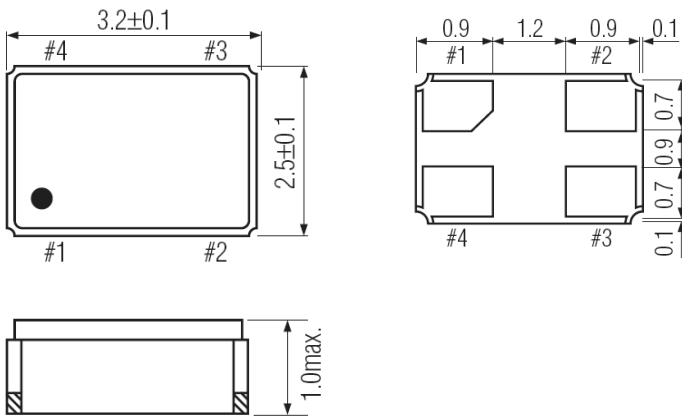


Figure 1) Top, Side and Bottom views

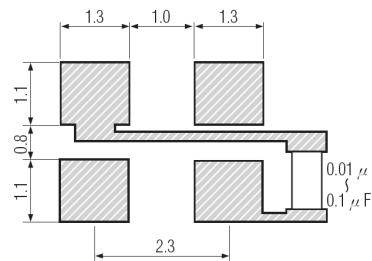


Figure 2) Suggested Land Pattern

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

Tri-State Control Voltage	
Pad 1	Pad 4
Open	Oscillation
ViH 90% VDD Min	Oscillation
ViL 10% VDD Max	High Impedance

Note: Internal crystal oscillation to be halted (Pin #1=ViL)

PART NUMBER: ECS-327KE-TR

