

The ultra-miniature ECS-.327-CDX-1128 is a very compact SMD Tuning Fork Crystal. The 3.2 x 1.5 x 0.9 mm ceramic package is ideal for today's SMD manufacturing environment.



- Low Profile
- 3.2 x 1.5 mm Footprint
- Extended Temp. Range
- Low ESR
- RoHS Compliant

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-.327-CDX-1128			UNITS
		MIN	TYP	MAX	
Frequency			32.768		KHz
Frequency Tolerance	@ +25°C			± 20	ppm
Temperature Coefficient		-0.028	-0.034	-0.040	ppm/°C ²
Shunt Capacitance	Co			2.0	pF
Load Capacitance			6		pF
Drive Level	DL		0.1	0.5	μW
Equivalent Series Resistance	R1		55K	60K	Ω
Motional Capacitance	C1	3.0		4.4	fF
Crystal Q		13,000			
Turnover Temperature		+20	+25	+30	°C
Operating Temperature	Topr	-40		+85	°C
Storage Temperature	Tstg	-55		+125	°C
Aging (First Year)	@ +25°C ±3°C			±3	ppm
Insulation Resistance	@ 100Vdc ±15V	500M			Ω

DIMENSIONS (mm)

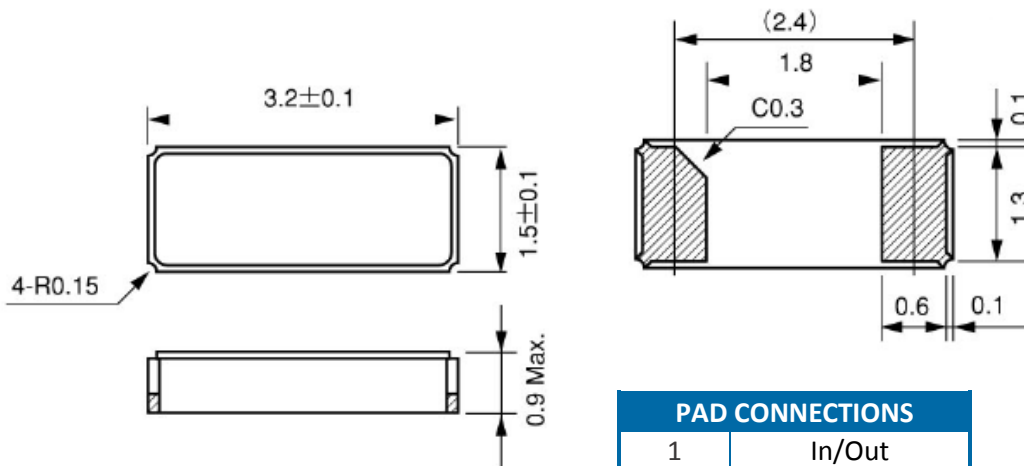


Figure 1) Top, Side, and Bottom views

PAD CONNECTIONS	
1	In/Out
2	Out/In

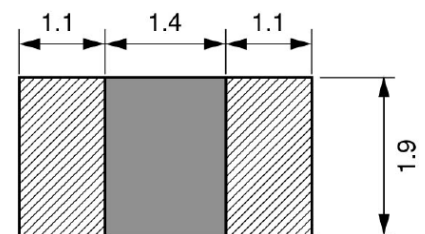
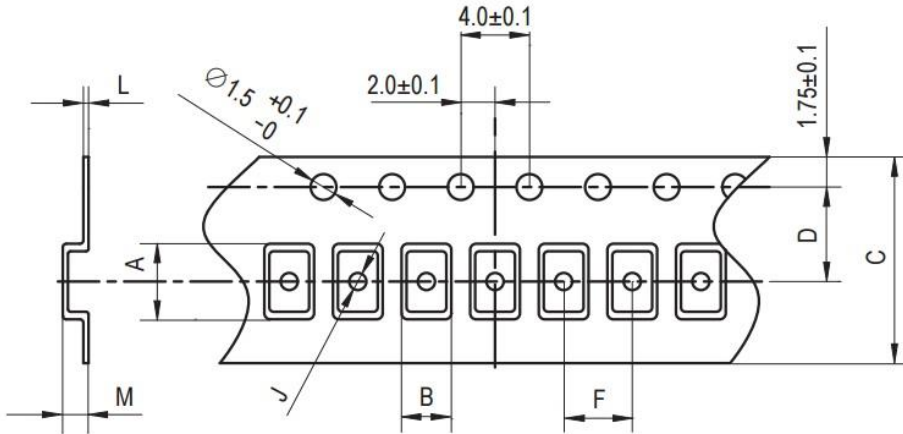


Figure 2) Suggested Land Pattern

PART NUMBER: Example ECS-.327-CDX-1128

POCKET TAPE DIMENSIONS (mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
3.4	1.7	12.0	5.5	4.0	1.0	0.3	1.2	180	3000pcs

SOLDER PROFILE	
Peak solder Temp +260°C Max 10 sec Max.	
2 Cycles Max.	
MSL 1, Lead Finish Au	



Figure 1) Suggested Reflow Profile