



- **▶** Low profile
- ► 1.6 x 1.2 mm Footprint
- Extended Temp Range Option
- RoHS Compliant
- ► MSL: 1
- ► Lead Finish: Au

## ECX-1247 SMD CRYSTAL

The sub miniature ECX-1247 is a very compact SMD Crystal. The 1.6  $\times$  1.2  $\times$  0.3 mm ceramic package is ideal for today's SMD manufacturing environment.

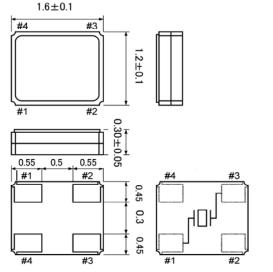
#### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	· ·	ECX-124	7	UNITS	
PARAIVIETERS		MIN	TYP	MAX	UNITS	
Frequency Range		24.000		80.000	MHz	
Frequency Tolerance	at +25°C			± 20 *	ppm	
Frequency Stability	-20 to +70°C			± 30 *	ppm	
Shunt Capacitance				5	pF	
Load Capacitance	Specify in P/N		8		pF	
Drive Level				100	μW	
Operating Temperature		-20		+70	°C	
Storage Temperature		-40		+85	°C	
Aging (Per Year)	@ +25°C ±3°C			±5	ppm	

#### **EOUIVALENT SERIES RESISTANCE/MODE OF OSCILLATION**

FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω	FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω
24.00 ~ 31.999	Fundamental	150	38.000 ~ 80.000	Fundamental	80
32.000 ~ 37.999	Fundamental	100			

### **DIMENSIONS (mm)**



Pad Connections				
1	In/Out			
2	Gnd			
3	Out/In			
4	Gnd			

Figure 1) Top, Side, Bottom, End views and Crystal Connection (Top View)

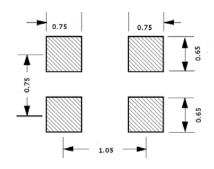


Figure 2) Suggested Land Pattern

# PART NUMBERING GUIDE: Example ECS-260-8-47-TR ECS - Frequency Abbreviation - Load Capacitance - Package

260 = 26.000 MHz See P/N Guide 8 =8 pF S=Series 47 = ECX-1247 Tolerance \* Stability

| Blank = Std | Blank = Std | D = ± 100 ppm | E = ± 50 ppm | C = ± 10 ppm | H = ± 25 ppm

**Custom Options** 

 $W = \pm 15 ppm$ 

 $K = \pm 10 ppm$ 

\*Consult Factory for available stability options over extended temp range.

U = -55 ~ +125°C

TR= Tape & Reel 1K/Reel

**Packaging** 

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