

ECX-1637B SMD CRYSTAL

ECS INC

The sub miniature ECX-1637B is a very compact SMD Crystal. The $2.0 \times 1.6 \times 0.45$ mm ceramic package is ideal for wireless applications.

Request a Sample

ECX-1637B SMD CRYSTAL

- Low Profile
- 2.0 x 1.6 mm Footprint
- Extended Temp. Range Option
- RoHS Compliant

DIMENSIONS (mm)

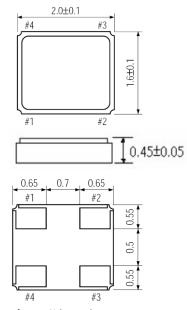
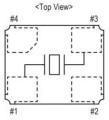


Figure 1) Top, Side, and Bottom

Crystal is symmetrical, pad 1 & 3 are interchangeable. Chamfer on the bottom pad has no electrical significance.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-1637B			UNITS
		MIN	TYP	MAX	
Frequency		16.000		50.000	MHz
Mode of Oscillation	Fundamental				
Frequency Tolerance*	@ +25°C (C option)			± 10	ppm
Frequency Stability* -30 ~ +85°C (KY option)				± 10	ppm
Shunt Capacitance	Со			3	pF
Load Capacitance	Specify in P/N		8		pF
Drive Level	DL			100	μW
Operating Temperature*	Topr (Y option)	-30		+85	°C
Storage Temperature	Tstg	-55		+125	°C
Aging (First Year)	@ +25°C ±3°C			±1	ppm



<#2 & #4 : Grounded to metal lid>

Frequency (MHz)	ESR Ω Max.
16.000 ~ 19.999	150
20.000 ~ 23.999	70
24.000 ~ 39.999	50
40.000 ~ 50.000	40

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

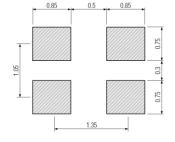


Figure 2) Suggested land

 $U = -55 \sim +125 °C$

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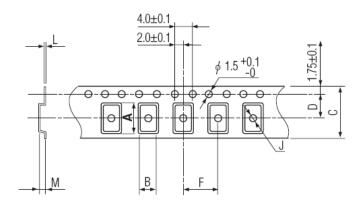
PART NUMBERING GUIDE: Example ECS-240-8-37B-CKY-TR

 $K = \pm 10 ppm \dagger$

ECS - FREQUENCY ABBREVIATION		l LOAD	PACKAGE		AVAILABLE OPTIONS		PACKAGING	
		CAPACITANCE		Toleranc	e Stability	Temp Range		
ECS	240 = 24.000 MHz See P/N Guide	8 = 8 pF 10 = 10 pF S=Series	-37B = ECX-1637B	Blank = Std A = ± 25 ppm J = ± 20 ppm R = ± 15 ppm C = ± 10 ppm	Blank= Std D= ±100 ppm E = ±50 ppm G = ±30 ppm H = ±25 ppm	Blank= Std L = -10 ~ +70°C M = -20 ~ +70°C Y = -30 ~ +85°C N = -40 ~ +85°C	1K/Reel	
. ,	vailable options in P/N. ECS for availability over exten	ded temp range.		7 = ± 7 ppm	T = ± 20 ppm † W = ±15 ppm †	P = -40 ~ +105°C S = -40 ~ +125°C		



POCKET TAPE DIMENSIONS (mm)



Α	В	С	D	F	J	L	М	Reel Dia.	Qty/Reel
2.25	1.85	8.0	3.5	4.0	1.0	0.25	0.65	180	1000

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

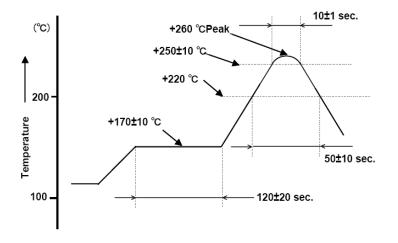


Figure 1) Suggested Reflow Profile