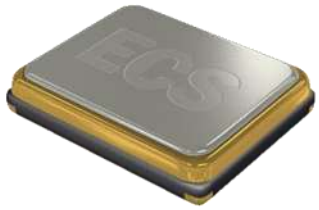
ECX-1247B SMD CRYSTAL

The sub miniature ECX-1247B is a very compact SMD Crystal. The 1.6 x 1.2 x 0.3 mm ceramic package is ideal for RFID, NFC, WiFi, RF, Video, and Audio applications.

Request a Sample

ECX-1247B SMD CRYSTAL



- Low 1st Year Aging
- 1.6 x 1.2 mm Footprint
- Extended Temp. Range Option
- RoHS Compliant

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-1247B			UNITS
		MIN	TYP	MAX	
Frequency		24.000		80.000	MHz
Mode of Oscillation	Fundamental				
Frequency Tolerance*	@ +25°C			± 7	ppm
Frequency Stability*	-20 ~ +70°C			± 10	ppm
Shunt Capacitance	Co			5	pF
Load Capacitance	Specify in P/N		8		pF
Drive Level	DL			100	µW
Operating Temperature*	Topr	-40		+85	°C
Storage Temperature	Tstg	-40		+125	°C
Aging (First Year)	@ +25°C ±3°C			±1	ppm

DIMENSIONS (mm)

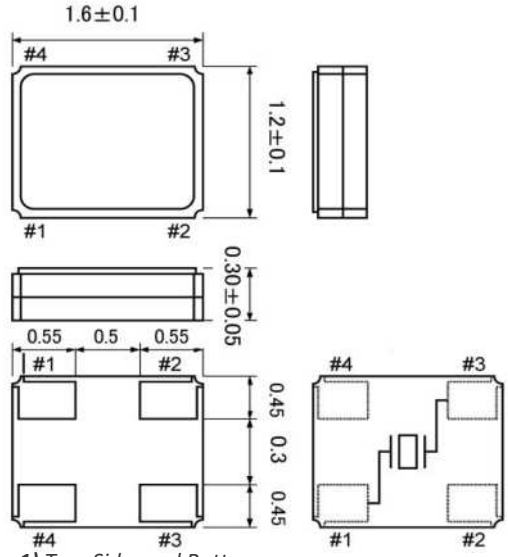


Figure 1) *Top, Side, and Bottom*

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

Frequency (MHz)	ESR Ω Max.
24.000 ~ 29.999	100
30.000 ~ 48.999	80
49.000 ~ 80.000	50

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

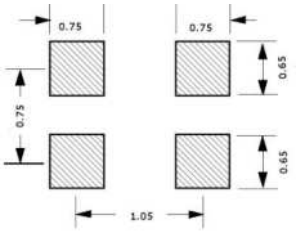


Figure 2) *Suggested land*

PART NUMBERING GUIDE: Example ECS-320-8-47B-7KM-TR

ECS -	FREQUENCY ABBREVIATION	LOAD CAPACITANCE	PACKAGE	AVAILABLE OPTIONS			PACKAGING
				Tolerance	Stability	Temp Range	
ECS	320 = 32.000 MHz See P/N Guide	8 = 8 pF S=Series	-47B = ECX-1247B	Blank = Std A = ± 25 ppm J = ± 20 ppm R = ± 15 ppm C = ± 10 ppm 7 = ± 7 ppm	Blank= Std D= ±100 ppm E = ± 50 ppm G = ± 30 ppm H = ± 25 ppm T = ± 20 ppm † W = ±15 ppm † K = ± 10 ppm †	Blank= Std L = -10 ~ +70°C M = -20 ~ +70°C Y = -30 ~ +85°C N = -40 ~ +85°C P = -40 ~ +105°C S = -40 ~ +125°C	TR = Tape & Reel 1K/Reel

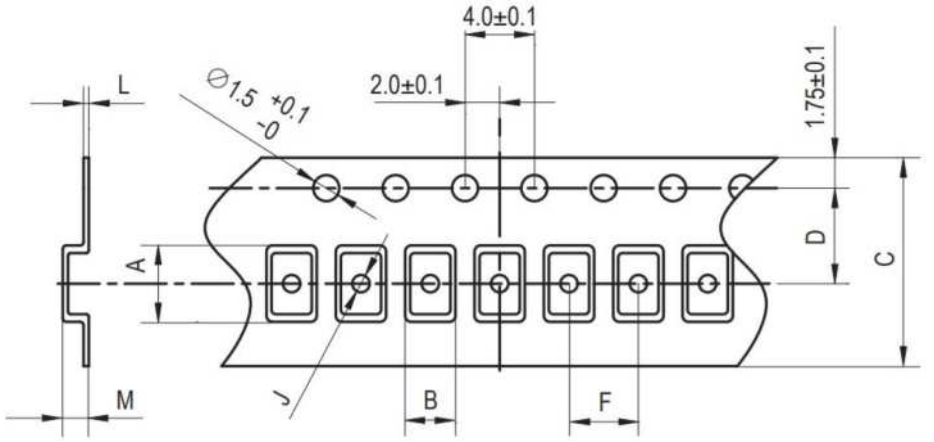
* Specify available options in P/N.

† Contact ECS for availability over extended temp range.

Rev.2019

ECX-1247B
SMD CRYSTAL

POCKET TAPE DIMENSIONS (mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
1.84	1.55	8.0	3.5	4.0	0.5	0.25	0.45	180	1000

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

DEVELOPED FREQUENCIES	
Abbreviation	Frequency (MHZ)
240	24.000
245.7	24.576
260	26.000
320	32.000
360	36.000
400	40.000
480	48.000
500	50.000

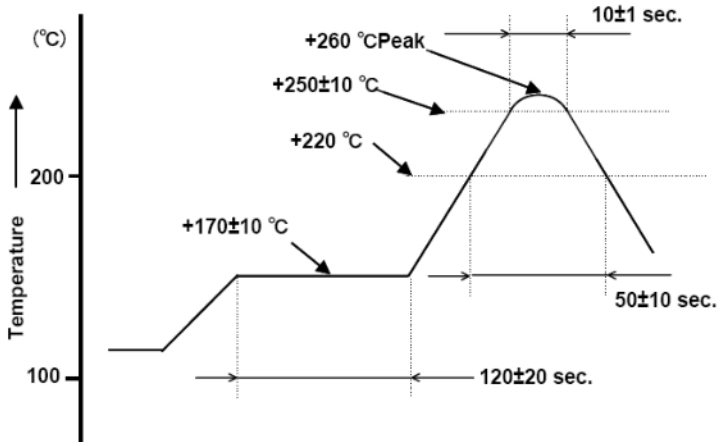


Figure 1) *Suggested Reflow Profile*