

ECX-1637B SMD CRYSTAL

Request a Sample



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

ECX-1637B SMD CRYSTAL

- Low 1st Year Aging ±1 ppm Max.
- 2.0 x 1.6 mm Footprint
- Extended Temp. Range Option
- RoHS Compliant

DIMENSIONS (mm)

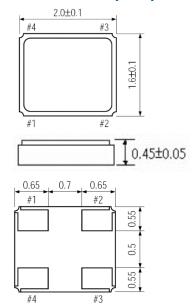
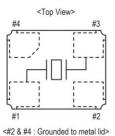


Figure 1) Top, Side, and Bottom

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 | | 96.000 | 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 | рF | |
| Load Capacitance | Specify in P/N | | 8 | | рF | |
| 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 | |



| Pad C | onnections |
|-------|------------|
| 1 | In/Out |
| 2 | Gnd |
| 3 | Out/In |

Gnd

| ESR Ω Max. | | |
|------------|--|--|
| 150 | | |
| 70 | | |
| 50 | | |
| 40 | | |
| 25 | | |
| | | |

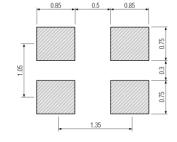


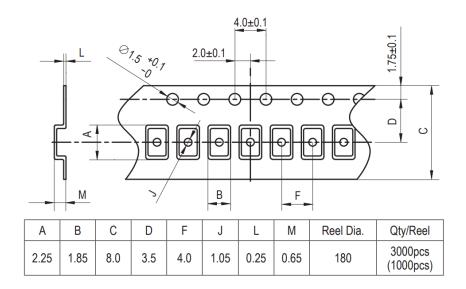
Figure 2) Suggested land

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

| ECS - FF | REQUENCY ABBREVIATION | LOAD | PACKAGE | | AVAILABLE OPT | IONS | PACKAGING |
|----------|---|------------------------------------|---------------------|---|---|---|-----------|
| | | CAPACITANCE | | Tolerance Range | e Stability | Temp | |
| 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 | Blank= Std D= ±100 ppm E = ± 50 ppm G = ± 30 ppm | Blank= Std L = -10 ~ +70°C M = -20 ~ +70°C Y = -30 ~ +85°C | Otv/Reel |
| | vailable options in P/N. CCS for availability over extende | ed temp range. | | C = ± 10 ppm 7 = ± 7 ppm | H = ± 25 ppm T = ± 20 ppm † W = ±15 ppm † K = ± 10 ppm † | N = -40 ~ +85°C P = -40 ~ +105°C S = -40 ~ +125°C U = -55 ~ +125°C | |



POCKET TAPE DIMENSIONS (mm)



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

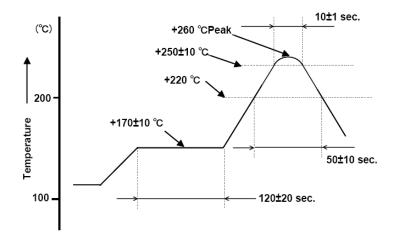


Figure 1) Suggested Reflow Profile