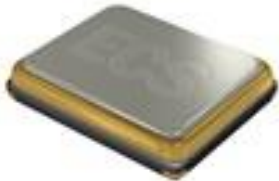


The ECX-1247Q is a very compact SMD Crystal with a 1.6 x 1.2 mm footprint. AEC-Q200 Qualified.

ECX-1247Q SMD CRYSTAL

[Request a Sample](#)

ECX-1247Q SMD CRYSTAL



- Low Profile
- 1.6 x 1.2 mm Footprint
- RoHS Compliant
- AEC-Q200 Qualified

DIMENSIONS (mm)

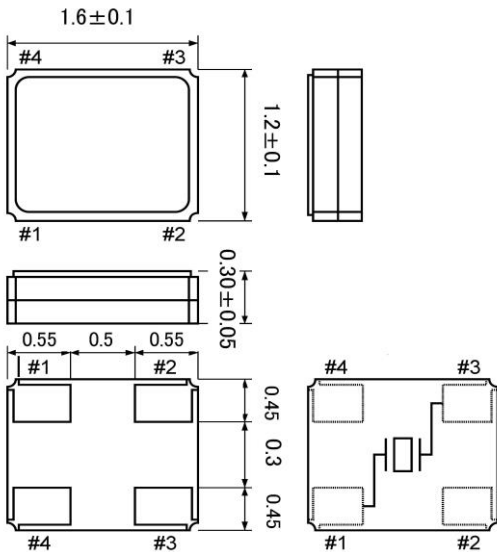


Figure 1) Top, Side, and Bottom

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

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | ECX-1247Q | | | UNITS |
|------------------------|----------------|-----------|-----|--------|-------|
| | | MIN | TYP | MAX | |
| Frequency | | 26.000 | | 40.000 | MHz |
| Mode of Oscillation | Fundamental | | | | |
| Frequency Tolerance* | @ +25°C | | | ± 30 | ppm |
| Frequency Stability* | -40 ~ +85°C | | | ± 50 | ppm |
| Shunt Capacitance | Co | | | 5 | pF |
| Load Capacitance | Specify in P/N | | 8 | | pF |
| Drive Level | DL | | 10 | 100 | μW |
| Operating Temperature* | Topr | -40 | | +85 | °C |
| Storage Temperature | Tstg | -40 | | +125 | °C |
| Aging (Per Year) | @ +25°C ±3°C | | | ±5 | ppm |

| Frequency (MHz) | ESR Ω Max. |
|-----------------|------------|
| 26.000 ~ 29.999 | 100 |
| 30.000 ~ 40.000 | 80 |

Pad Connections

| | |
|---|--------|
| 1 | In/Out |
| 2 | Gnd |
| 3 | Out/In |
| 4 | Gnd |

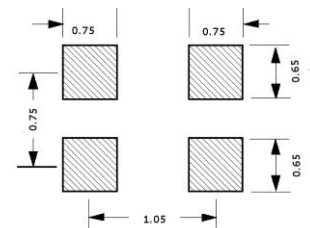


Figure 2) Suggested land

PART NUMBERING GUIDE: Example ECS-260-8-47Q-TR

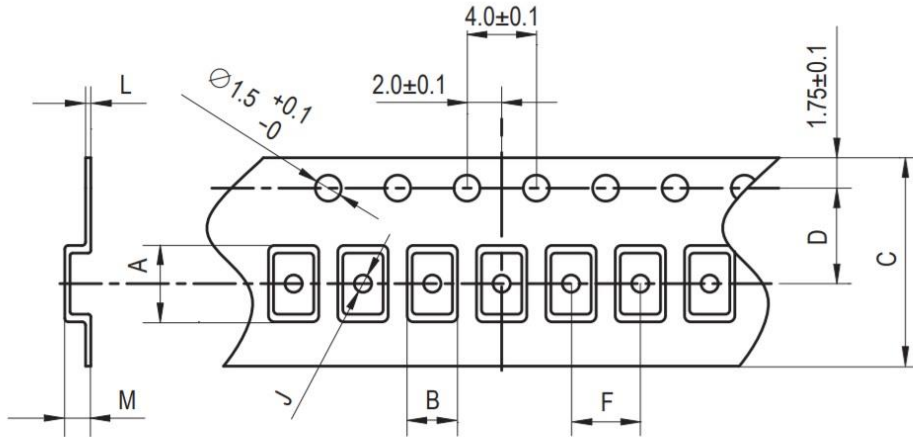
| ECS - FREQUENCY ABBREVIATION | LOAD CAPACITANCE | PACKAGE | AVAILABLE OPTIONS | | | PACKAGING | |
|------------------------------|-----------------------------------|----------------------|--------------------|---|--|---|-----------------------------------|
| | | | Tolerance | Stability | Temp Range | | |
| ECS | 260 = 26.000 MHz See P/N Guide | 8 = 8 pF S=Series | 47Q = ECX-1247Q | 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 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.2017

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 |

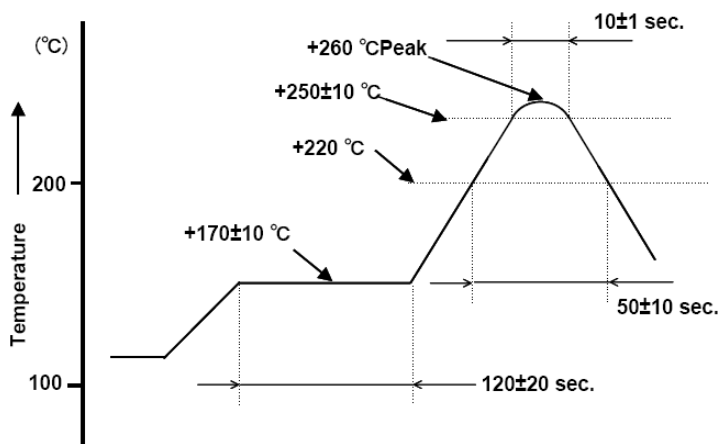


Figure 1) Suggested Reflow Profile