

- Miniature package: 4.0 x 2.5 x 0.6mm
- Gold-plated ceramic base with metal seam-welded package
- Very low ageing
- Designed for hand-held equipment, PDAs, Blue Tooth, GPS
- High shock and vibration resistance



## 4.0 x 2.5 x 0.6mm SMD



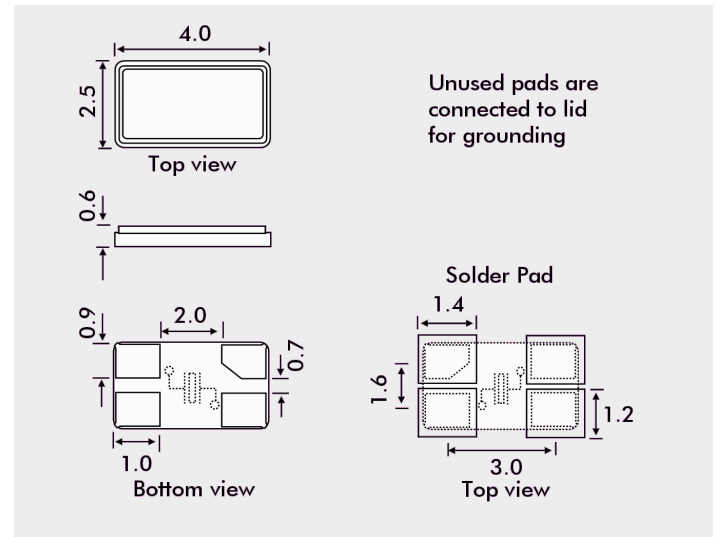
### DESCRIPTION

X42 crystals are micro-miniature surface-mount mount crystals. The crystals have a gold plated ceramic base and a seam welded metal lid providing a stable crystal with very low ageing. The rugged construction ensures that this crystal has high shock and vibration resistance. The crystal has been specifically designed for use in small hand-held communication equipment such as PDAs, GPS and Bluetooth.

### SPECIFICATION

<b>Frequency Range</b>	
AT-Cut Fundamental:	12.0MHz to 50.0MHz
<b>Calibration Tolerance at 25°C*:</b> from $\pm 5$ ppm ( $\pm 10$ , $\pm 20$ or $\pm 30$ ppm standard)	
<b>Frequency stability*</b>	
-10° to +60°C	from $\pm 5$ ppm
-20° to +70°C	from $\pm 10$ ppm
-30° to +85°C	from $\pm 10$ ppm
<b>Storage Temperature:</b> -40°~+85°C	
<b>Equivalent Series Resistance:</b> See table	
<b>Shunt Capacitance (C0):</b> 2pF to 4pF typical, 5pF maximum	
<b>Load Capacitance (CL):</b> Series or from 10pF to 32pF (Customer specified CL)	
<b>Ageing:</b> $< \pm 3$ ppm per year at +25°C	
<b>Drive level:</b> 100 $\mu$ W max., 10 $\mu$ W min.,	
<b>Reflow Soldering:</b> 10s maximum at 260°C twice or 180s at 230°C, once.	
<b>Packaging:</b> EIA tape and reel 1000 pieces per reel	
<b>RoHS Status:</b> RoHS Compliant and pB free	

### OUTLINE & DIMENSIONS



### EQUIVALENT SERIES RESISTANCE

Frequency Range MHz	ESR Ohms Max.
12.0 ~ 16.0	80
16.1 ~ 60.0	50

### PART NUMBER FORMAT

