

# Model ATXN6077A

## Crystal

### Features:

- Stable frequency over temperature and drive level
- Low Profile Seam Weld Package
- Optional machine readable crystal temperature characteristics

### Description and Applications:

Surface mount 3.5x6mm reference crystal for use in GSM handsets, 2-way radios, pagers, and other portable electronics requiring a stable frequency source.



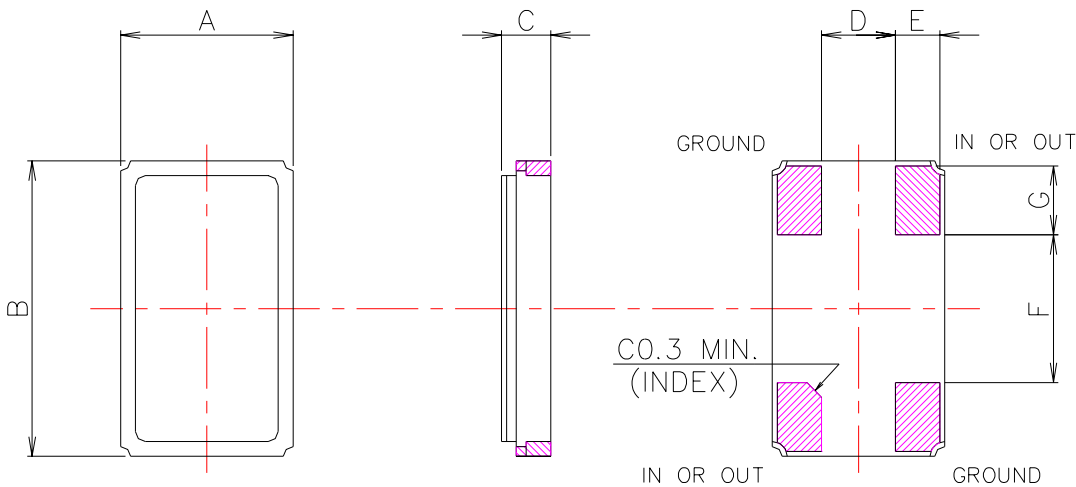
### Electrical Specifications:

| ATXN6077A                                                                                                                                               | Specification                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Nominal Frequency                                                                                                                                       | 13.0 Mhz                                 |
| Mode of Vibration                                                                                                                                       | Fundamental                              |
| Storage Temperature Range                                                                                                                               | -40 C to 85 C                            |
| Frequency Stability over Temperature                                                                                                                    | ± 11 PPM (-30 C to 85C)                  |
| Frequency perturbation (Worst case frequency deviation between actual measurement and 4 <sup>th</sup> order least square polynomial curve fit estimate) | +/- 1.0 PPM                              |
| Frequency Make Tolerance                                                                                                                                | ± 10 PPM @25 C +/- 3°C                   |
| Resonance Resistance                                                                                                                                    | 35Ω Max.                                 |
| Drive Level                                                                                                                                             | 100 μ W Max.                             |
| Load Capacitance - CL                                                                                                                                   | 10 pF                                    |
| Motional Capacitance - Cm                                                                                                                               | 6.0 fF                                   |
| Shunt Capacitance - Co                                                                                                                                  | 1.3 pF Max.                              |
| Insulation Resistance                                                                                                                                   | 500 MΩ Min./DC 100V                      |
| Aging                                                                                                                                                   | +/-1PPM/Yr @25C                          |
| Marking                                                                                                                                                 | Laser marking, print or machine readable |

Post Environmental Performance:

|                                                                                                                 |                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Mechanical Shock:</b><br>@ a half sine pulse shock of 0.3 milliseconds duration and a peak level of 8700 g's | $\Delta F_s < \pm 2.5 \text{ PPM}$<br>$\Delta R_s < \pm 3 \Omega \text{ or } 10\%$ |
| <b>Vibration:</b><br>Per 2 x EIA RS-152-B                                                                       | $\Delta F_s < \pm 2.5 \text{ PPM}$<br>$\Delta R_s < \pm 3 \Omega \text{ or } 10\%$ |

Mechanical Dimensions (mm):



| ITEM<br>UNIT | A             | B             | C             | D             | E        | F             | G        |
|--------------|---------------|---------------|---------------|---------------|----------|---------------|----------|
| M/M          | 3.50<br>±0.13 | 6.00<br>±0.13 | 1.00<br>±0.16 | 1.50<br>±0.13 | 0.9 REF. | 3.00<br>±0.13 | 1.4 REF. |