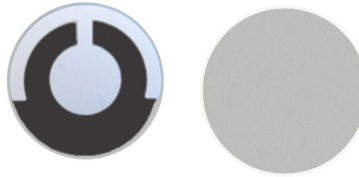


## Product Specifications

### TAN05BS

#### Silver, 5 MHz Quartz Crystals



**Description:** Quartz sensor for use in thin film deposition monitors and controllers, including Balzers, and Evatec instruments.

#### Physical Specification:

- 1) **Material:** Pure Silicon Dioxide monocrystal, Electronic Grade Quartz with Bechmann optimized Geometry and enhanced energy trapping of the fundamental mode.
- 2) **Dimensions:** 0.550"  $\pm$  .000/-.002" OD
- 3) **Contour:** plano convex
- 4) **Finish:** 7 microns rms roughness plano and contour sides
- 5) **Defects:** No chips, scratches or etch marks within a 13.95 mm diameter clear aperture
- 6) **Electrodes:** "Balzers" patterned Silver with Oxygen reactive intermediate layer for improved thin-film integrity.

#### Electrical Specification:

- 1) **Resonant Frequency:** 4.960-4.975 MHz, fundamental series resonance
- 2) **Resistance:** <10 Ohms, plated
- 3) **Contact Resistance:** <10 Ohms edge to edge on pattern side
- 4) **Spurious Modes:** First Anharmonic >150 KHz above fundamental

#### Appearance:

- 1) No misaligned electrodes
- 2) No uneven coloration
- 3) No off-center patterns
- 4) No scratches, scuffs, or etch markings present
- 5) No chips or cracks