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# **Product Specifications**

#### TAN05RCBS

## Silver, 5 MHz RC 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" +. 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: <40 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