

2003 Perimeter Rd Suite E Greenville, SC 29605-5276 Phone (864) 277-1560 Fax (864) 277-1561 www.PhillipTech.com

### **Product Specifications**

# TAN05IG

## Premium Gold, 5 MHz Quartz Crystals



**Description:** Quartz sensor for use in thin film deposition monitors and controllers, including Inficon, Maxtek, Sigma Instruments, and Sycon 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) No chips, scratches or etch marks within a 13.95 mm diameter clear aperture
- 6) **Electrodes** "Inficon" patterned gold with Oxygen reactive intermediate layer for improved thin-film integrity.

### Electrical Specification:

- 1) **Resonant Frequency:** 4.980-4.989 MHz, fundamental series resonance
- 2) Resistance: <15 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