

**Yokowo introduces "A gold alloy 1.3mm OAL spring contact pin
for high speed low inductance BGA device testing"**

Yokowo Co., Ltd.
7-5-11 Takinogawa,
Kita-Ku Tokyo, Japan
Tel : 03-3916-3111 (Rep.)

■ Summary

Yokowo's high precision manufacturing capabilities, combined with its expertise in radio frequency technologies, has produced a new low profile 0.6nH self inductance spring contact pin for high speed testing of BGA devices.

■ Background

Increasingly efficient, functional, and convenient semiconductor devices are accelerating the need for high frequency test. BGA type packaging is prevalent among these 'next generation' IC products, and the demand for these high speed LSI and high speed memory devices is rising rapidly. These market conditions propelled the development of this new contact spring pin.

■ Outline of this new "contact probe"

This low inductance pin is only 1mm in length at working travel as opposed to the existing Yokowo low profile probe that has a 1.8mm working length. The new pin's self inductance rating is only .6nH whereas Yokowo's existing low profile pin is rated as a 1nH probe. And the new pin's frequency capabilities are now 5GHz, up from the 3GHz specified for Yokowo's existing low profile probe.

Pin component materials are also new! The new pin utilizes a gold alloy material, eliminating the need for problematic plating. This approach facilitates lower contact resistance and more stable resistance throughout the life of the probe. It is expected that this pin, used in a test socket, will allow for production testing of much higher speed devices than are currently tested with longer length spring contact probes.



0.6nH BGA device type contact probe specification

- Overall length: 1.3mm
- Working stroke: 0.3mm
- Working length: 1.0mm (reduced from 1.8mm)
- Spring force: 20 grams
- Self Inductance: 0.6nH (reduced from 1.0nH)
- Frequency capabilities: DC ~ 5GHz (increased from DC ~ 3GHz)
- Pin pitch: .8mm and greater
- Probe tips are available in 4 point crown for BGA and conical tip for LGA

Samples have been shipped this October to semiconductor test equipment manufactures.

Enquiries about this new release to:
Circuit Testing Connectors Division
TEL.+81-3-3916-3116