

# synchro/resolver to digital converter tracking 10-12-14 bit

series 168F200/300/100

## **GENERAL DATA:**

The 168F series is a family of miniature, low profile, high performance synchro (and resolver) to digital converters. Units measure  $2.625 \times 3.125 \times .40$  inches, weigh only 3.5 ounces, and incorporate the industry standard pin-out. The converters accept either 3 wire synchro or 4 wire resolver input data over a frequency range of 50 Hz to 1200 Hz without external modules. Converters are available in 10, 12 or 14 bit resolutions.

Typical of tracking-type converters, the analog synchro (or resolver) input data is accurately and continuously converted into binary digital angle data. The 168F series is a true "type II" servo loop converter. Their high input impedance and inherent transient protection insure trouble-free system integration.

All units are completely trimmed and adjustment-free; allowing absolute interchangeability. Reliability is assured by the use of high grade components rigidly encapsulated and electrically stressed to the lowest possible levels.

### APPLICATIONS:

ORDNANCE CONTROL - RADAR TRACKING SYSTEMS - NAVIGATION SYSTEMS - COLLISION AVOIDANCE SYSTEMS - PROCESS CONTROL

#### **FEATURES:**

☐ Single module operates 50-1200 Hz
☐ Low profile module
☐ Insensitive to amplitude and frequency variations
☐ High speed tracking
☐ High input impedance
☐ High accuracy, 4 minutes ±.9LSB (14 bits)
☐ Choice of TTL, HC, LSTTL or CMOS logic
☐ Multiple input option
☐ Over-voltage and transient protected
□ 0° to 70°C or -55° to 105°C temperature ranges
☐ 10, 12 or 14 bit resolutions
☐ Industry standard pin-out
☐ Choice of synchro or resolver input types
☐ Insensitive to harmonic distortion

#### **RELIABILITY:**

The 168F series is a second generation tracking type S/D converter. These units represent a significant improvement in performance and employ the latest in component and circuit technology. Reliability is assured by the use of military type passive components and industry standard high volume integrated circuits. Single PC board construction greatly reduces mechanical solder connections.

#### **DELIVERY:**

CSI maintains substantial quantities of the basic 168F series S/D converters and can deliver significant quantities in 4 to 6 weeks. Consult factory for exact delivery schedules.