

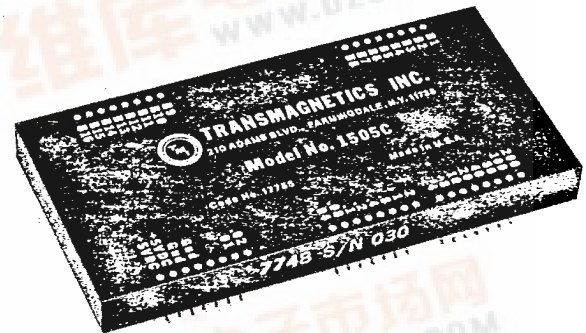
SERIES 1505

Revised December 1985

BINARY ANGLE TO SCALED BCD ANGLE (To 16 Bits)

FEATURES:

- Accuracy of 0.008°
- TTL/DTL Compatible
- Available for either 0°C to +70°C or -55°C to +100°C operation.
- Meets MIL-STD-202D, methods 204B, 101C, 105B, 106C, 107C, and 205D
- Hi-Rel 883B units on request



DESCRIPTION:

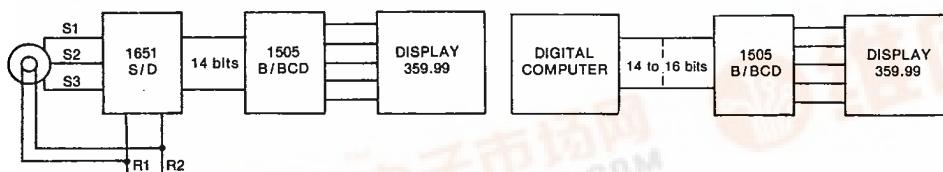
This miniaturized, all solid state device, accepts either 14 bit, 15 bit or 16 bit binary parallel data and converts this information into 5 decade BCD form. Input and output are scaled to represent an angular range of 0-359.99 mechanical degrees.

| SPECIFICATIONS: | *16 Bits In | *15 Bits In | *14 Bits In | 12 Bits In |
|---------------------------|--------------------------------------------------|--------------|--------------|--------------|
| Accuracy: | ±0.008° | ±0.008° | ±0.008° | ±0.055° |
| Input Resolution: | 0.005° | 0.011° | 0.022° | 0.1° |
| Input Logic: | Parallel, Positive TTL Level, Binary Coded Angle | | | |
| Fan In: | 1 TTL Load | 1 TTL Load | 1 TTL Load | 1 TTL Load |
| Output Resolution: | 5 Decade BCD | 5 Decade BCD | 5 Decade BCD | 4 Decade BCD |
| Fan Out: | 4 TTL Loads | 4 TTL Loads | 4 TTL Loads | 4 TTL Loads |
| Conversion Time: | 350 ns | 350 ns | 350 ns | 350 ns |
| Power Required: | +5VDC ±5% at 250ma same | | | |
| Weight: | 4 oz. | 4 oz. | 4oz. | 4oz. |
| Potting: | Units are potted. | | | |

Operating Temperature: Model C: 0°C to 70°C, Model M: -55°C to +100°C
Storage Temperature: -65°C to +125°C

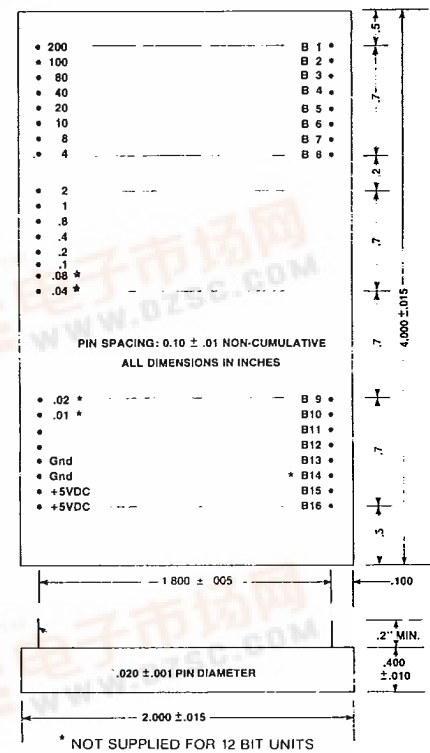
*While the accuracy remains the same, the output resolution is effected by a decrease in input resolution. Thus, with 14 bit input resolution, the output will change in 0.02° steps for each input LSB change. Occasionally the output will exhibit a 0.03° step to round off the input angle. With a 15 bit input the output will change in 0.01° steps with an occasional 0.02° step. With a 16 bit input the output will change consistently with 0.01° steps.

PRODUCT APPLICATIONS:



APPLICATION NOTES:

Unused inputs should be grounded. Unused outputs should be left unconnected. Externally parallel both common and both +5VDC pins.



PART NUMBER DESIGNATION:

1505***
 Add 883 for Hi-Rel
 Add B for 12 bit units
 Temperature range (C or M)

