



"3 or 4 Digit"

SYNCHRO/RESOLVER TO BCD CONVERTER

FEATURES

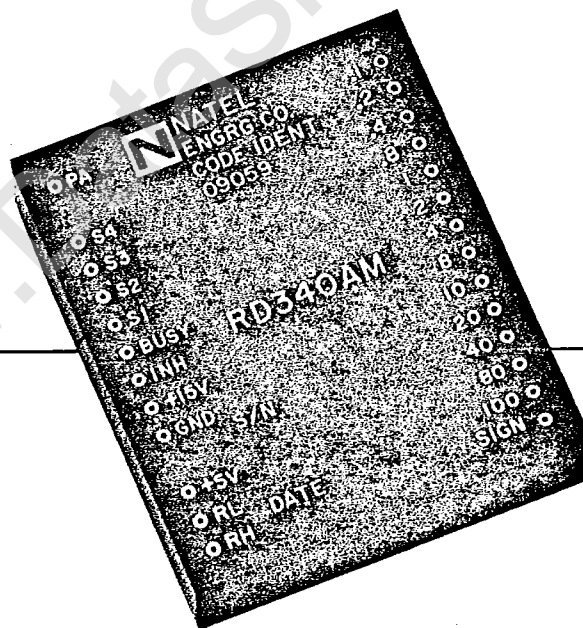
- Accuracy ± 6 min (4 digit)
 ± 30 min (3 digit)
- Tracking $1440^\circ/\text{sec}$
- Unipolar or Bipolar
- Reference/Stator Transformer Isolation
- Optional External Offset
- Optional Directional Indication

DESCRIPTION

Series 330 to 341 tracking synchro-to-BCD converters provide 3 or 4 digit outputs for angular displacements of 0 to 359.9° or $\pm 179.9^\circ$ (4-digit models). These converters are pin-compatible with industry standards and are used for digital displays of angular information from either 3-wire synchros or 4-wire resolvers.

These units feature high resolution and accuracy at a low cost. The conversion technique includes a type II servo loop that provides no lag and zero velocity error up to $1440^\circ/\text{sec}$. TTL, LPTTL and CMOS output options are available. Commercial, military and hi-rel versions are offered.

SYNCHRO
OR
RESOLVER



DIGITAL ANGLE
INDICATOR

SPECIFICATIONS**ELECTRICAL**

Input/Reference (I): (Vrms @ 400 Hz xfmr isolated)	11.8/26 11.8/115 26/26 26/115 90/115	Code (1) (2) (3) (5) (9)
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Tracking Rate: 1440°/sec

Digital Output: 3 or 4 digit BCD

Model/Range: SD330/±179°
SD331/0 - 359°
SD340/±179.9°
SD341/0 - 359.9°

Conversion Time: 0.5 μsec

Power Supply: +5 V-dc @ 450 mA
+15 V-dc @ 50 mA

Frequency (F):
(For 60 Hz operation,
separate xfmr module...
STM-60...is required)

60 Hz	Code (6)
400 Hz	(4)

ENVIRONMENTAL

**Operating Temperature
Range/Reliability (T):**

0 to 70 C/Commercial	Code (1)
-55 to 85 C/Military	(2)
-55 to 105 C/Military	(3)
0 to 70 C/MIL-STD-883C	(5)
-55 to 105 C/MIL-STD-883C	(7)
0 to 70 C/MIL-STD-883B	(8)
-55 to 105 C/MIL-STD-883B	(9)

Storage: -55 to 125 C

ORDERING INFORMATION**Synchro Format:**

SD XXX - I E I

Input/Reference Code
Frequency Code
Temperature/Reliability Code
Model Number

Resolver Format:

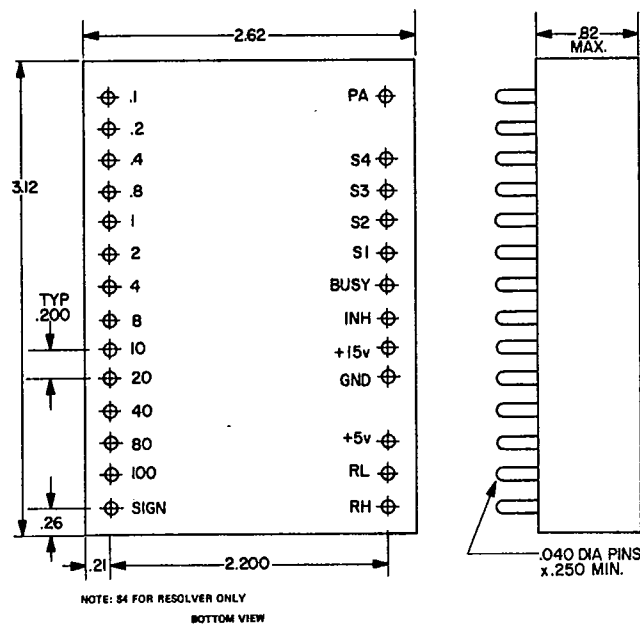
RDXXX - T F I

All codes are the same as for Synchro Format

MECHANICAL

Size: 2.625" x 3.125" x 0.82

Mounting: PCB plug-in with pins at .20" spacing.



Pin designations given are for model RD340. For pin designations on other models, consult Natel.

PA is the direction or offset option.