



**COMPUTER  
CONVERSIONS  
CORPORATION**

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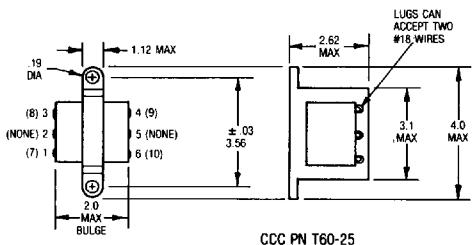
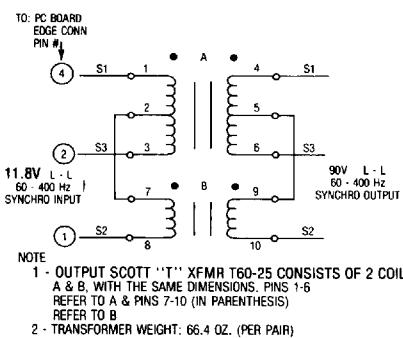
# HIGH POWER DIGITAL TO SYNCHRO CONVERTER **DSH SERIES**

## DESCRIPTION

The DSH Series are high power, continuously updating digital to synchro converters specifically designed to drive torque receivers and be immune to any and all overload or transient conditions. They will accept 10, 12 or 14 Bit natural binary angle data and convert it into 3 wire synchro signals with accuracies of up to 10 minutes of arc. All units feature a heat sink mounted thermal sensor which will shut down the power stages in any over-temperature condition. In addition, a digital fault indication is present when this condition occurs. If operation is required during an overtemperature situation an override control is provided. For increased reliability the synchro output and reference input are protected against the inductive kickback and stalled rotor condition of a torque receiver.

## FEATURES

- 25VA Output
- Drives TR and CT Loads
- Short Circuit, overload and transient protected
- Thermal shutdown
- Fault Indicator
- 14 Bit Resolution



## SPECIFICATIONS

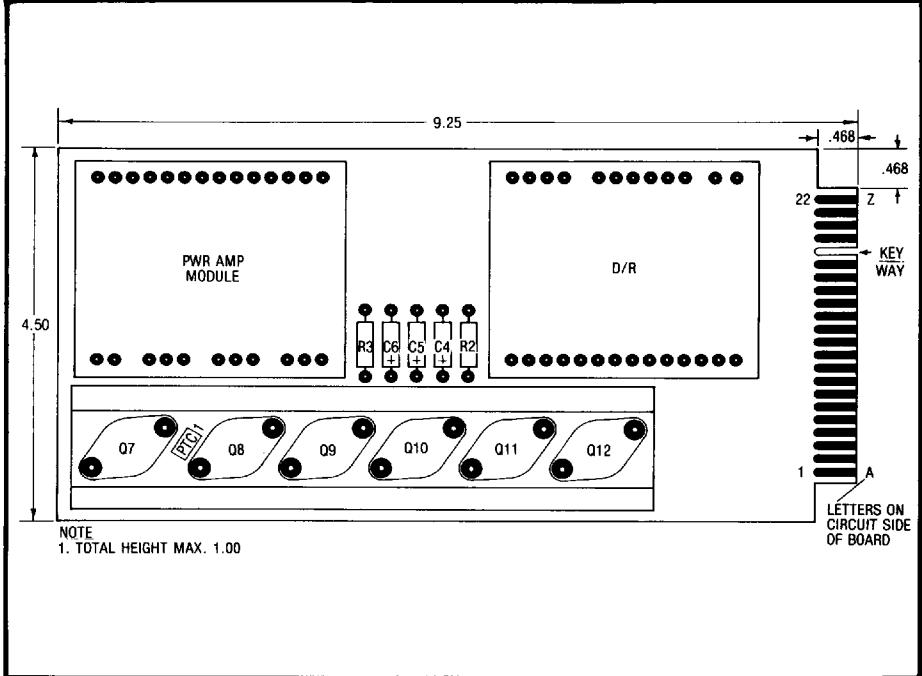
MODELS	14 BIT	12 BIT	10 BIT
400 Hz	DSH 40	DSH 412	DSH 410
60 Hz	DSH 60	DSH 612	DSH 610
ACCURACY (1)	± 10 minutes	± 21 minutes	± 30 minutes
CODING	Natural Binary Angle	*	*
LOGIC	Parallel positive logic DTL/TTL Compatable		
DIGITAL (3) INPUTS/OUTPUTS:	Logic "1" or open: Thermal cutoff overridden Logic "0" or gnd: Thermal cutoff operates normally	*	*
ENABLE (EN)	Logic "1" or open: power stage shutdown	*	*
DISABLE (DIS)	Logic "0" or gnd: normal operation		
FAULT (FT) THERMAL SENSOR TRIP POINT	Logic "1" indicates power stage shutdown 110°C	*	*
REFERENCE INPUT	26V rms 57 to 440 Hz @ 260k ohms SS differential (- L) 115V rms 57 to 440 Hz @ 1100k ohms SS differential (- H)	*	*
OUTPUT VOLTAGE: (4)	3 wire synchro - 25VA 11.8V L-L, 400 Hz SS Isol (DSH40SS-L) max. load 1 ohm 11.8V L-L, 400 Hz Xfmr Isol (DSH40XT-L) max. load 1 ohm 90V L-L, 400 Hz Xfmr Isol (DSH40XT-H) max. load 50 ohm 90V L-L, 50-400 Hz Xfmr Isol (DSH60XT) max. load-100 ohm	*	*
POWER SUPPLIES	+ 15V @ 65 ma, + load current - 15V @ 65 ma + load current + 5V @ 100 ma		
TEMPERATURE RANGE (6) OPERATING	0° to 70°C (-1) - 55°C to + 85°C (-2)	*	*
STORAGE	- 55°C to + 125°C	*	*
SIZE (2)	4.5" x 9.25" PC Card Plus output Xfmrs 2.0" x 4.0" x 2.62"		

### NOTES:

- 1) Accuracy applies over operating temperature range, ± 10% amplitude and frequency variations, & ± 5% power supply variations.
- 2) External transformers are included in transformer isolated models.
- 3) Input registers available.
- 4) Scale factor corrected units available (DSH40K).

### HOW TO ORDER

- 1) Specify basic model desired.
- 2) Choose operating temperature range.
- 3) To order a 10 Bit, 400Hz, 11.8V L-L, Synchro output, transformer isolated, with 15VA load capabilities, to operate from 0° to 70°C use part number DSH410XT-L-1-15.



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