

Table 5-3 (cont)  
TC02 Module Complement

<u>Number Required</u>	<u>Type</u>	<u>Description</u>	<u>Revision</u>
2	W104	PDP-9 I/O Bus Module	
3	W107	High Impedance Follower	A
1	W520	Comparator	B
8	W850	I/O Cable Connectors	A

### 5.3.2 Circuit Description

The following circuit description is provided to supplement the information in the Digital Logic Handbook C-105, and the circuit diagrams of the modules of the system follow.

#### MANCHESTER READER/WRITER G882 (Figure 5-3)

The Manchester Reader/Writer G882 is a standard size FLIP CHIP module for use in reading and writing one channel of Type TU55 DECTape. Each module contains two write amplifiers and one high-gain differential read amplifier. The read amplifier saturates with a 1 mV input.

#### Module Characteristics

The terminals for the module are shown in Figure 5-3. The input and output characteristics are as follows.

Reader Inputs E, D - are differential signals centered at ground. The input impedance is approximately 400 ohms to ground. A nominal input signal is a sine wave between 5 kc and 30 kc.

Reader Outputs U, V - are standard DEC levels of -3V and ground. The outputs can drive 10 mA of load at ground.

Writer Inputs - N, R, and P are standard DEC levels of -3V and ground. The input load of 2 mA is shared by the inputs at ground level.

Writer Outputs - J and K, are nominal 180-mA current pulses from ground to -15V. The power requirements of the module are +10(A)/18 mA and -15(B)/235 mA. The marginal check limits in both cases are  $\pm 20\%$ .

Both the reader and the writer circuits are returned to a common C, F ground.

### 5.3.3 Module Replacement Procedure

When necessary to remove modules, the procedure is as follows.

- a. Turn off all power to the Type TC02 DECTape Control.