



POWER SUPPLY

I. INTRODUCTION

The Regulated Power Supply card PS1 is a general purpose power supply regulator which should be used in conjunction with the rectifier module and transformer assembly S#1339A10. This card will provide regulated voltages, $\pm 24V$, for operating linear controllers and a regulated voltage, $+15V$, for operating high threshold logic boards.

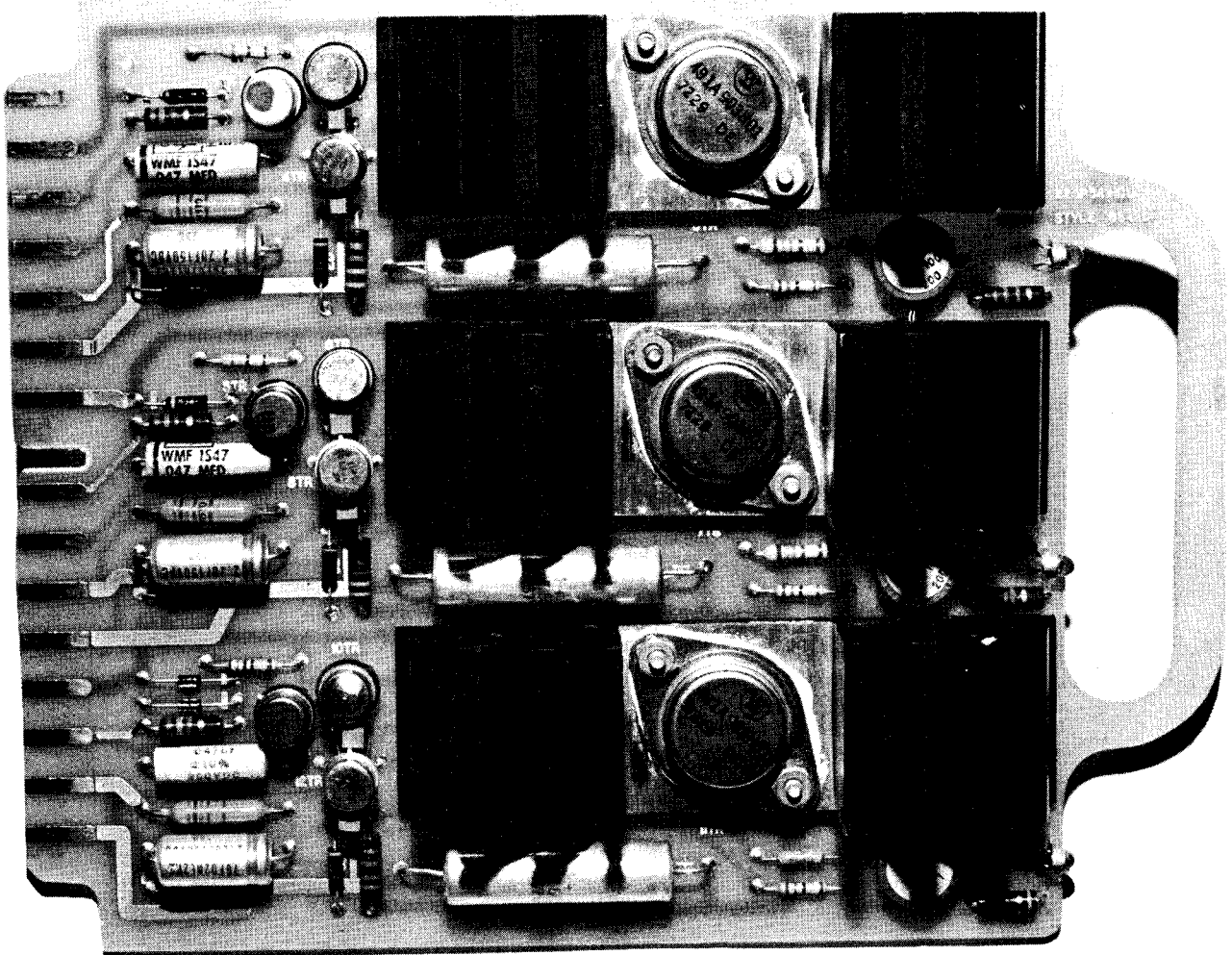


FIGURE 1

Figure 1 is a picture of the PS1 card. A front view locating all components by schematic identification is shown on the last page of the instruction leaflet.

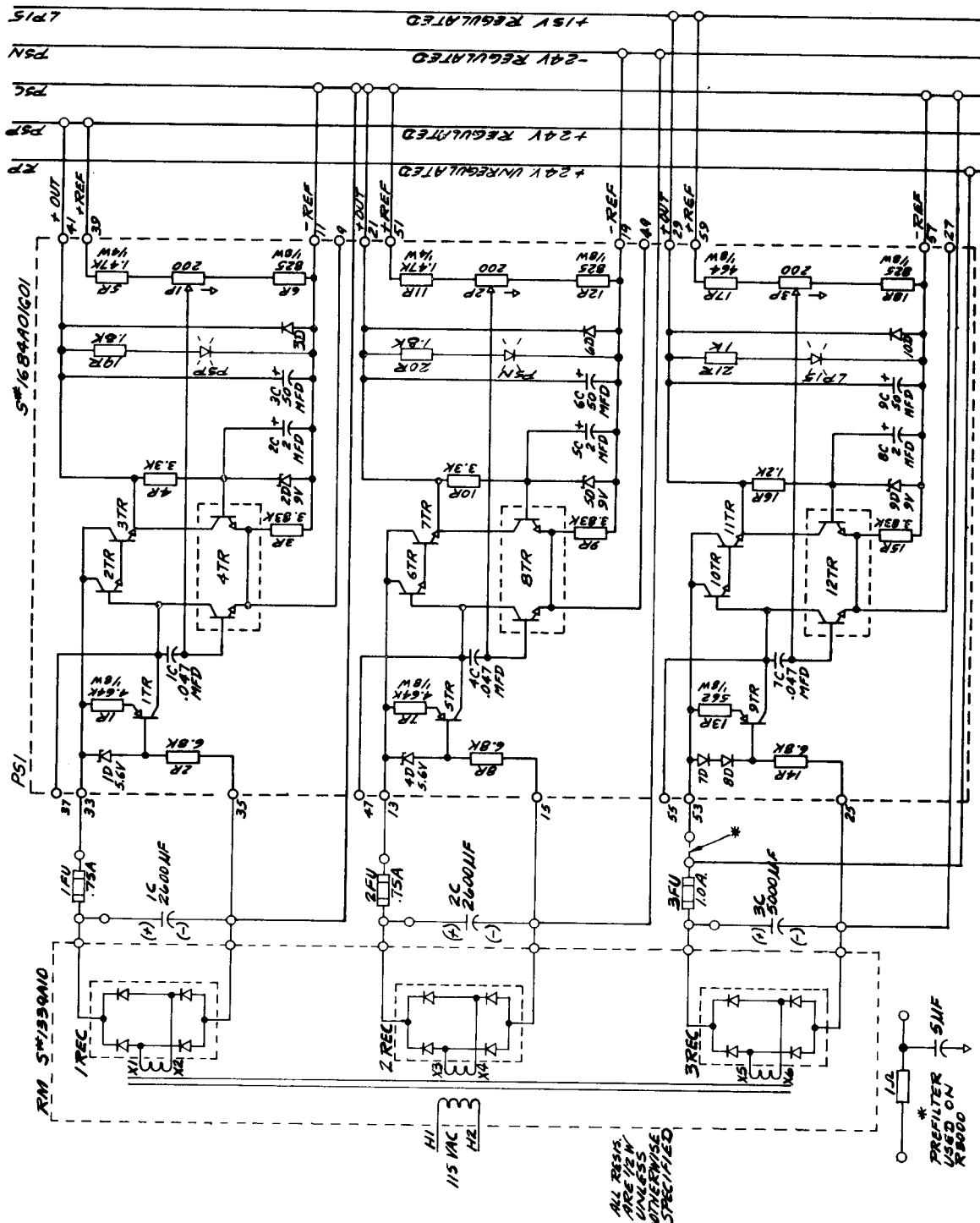


FIGURE 2

II. DESCRIPTION OF OPERATION

The module is designed to provide regulated $\pm 24V$ and regulated $+15V$. It must be used with the Unregulated Power Supply, RM, as shown in Figure 2.

The module employs a pre-regulator which provides constant current to the comparison network and cancels ripple and other incoming transients from the comparison and control networks, where it would otherwise be amplified and seen in the output.

Remote sensing is accomplished by running the positive side of the sampling resistors (+ Ref.) directly to the bus bar rather than to the positive power output terminal (+ Out) on the module. In this way the bus voltages are regulated to the desired levels ($\pm 24V$, $+15V$), and the + out terminal will be above the bus voltages in order to eliminate variations due to cable length, cable size and load currents.

Potentiometers 1P, 2P and 3P are factory set for $+24$, -24 and $+15$ volts and should not require readjustment. Each power supply regulator has an associated LED with designations PSP, PSN and LP15. The LED's provide a GO-NO GO status indication for the power supplies and the input fuses.

III. CHARACTERISTICS AND RATINGS

A. Input Voltages

1. 31.5 to 50VDC for 24V regulators
2. 19.2 to 30.5VDC for 15V regulators

B. Output Voltage Range

1. 22 to 26VDC for 24V regulator
2. 14 to 16VDC for 15V regulator

C. Regulation

1. Input (line): 0.01% change/volt AC input change
2. Output (load): 0.05% change from no load to full load
3. Temperature: 0.01%/°C

D. Current Range: 0 to 500ma

E. Ambient Operating Temperature: 0°C to 55°C

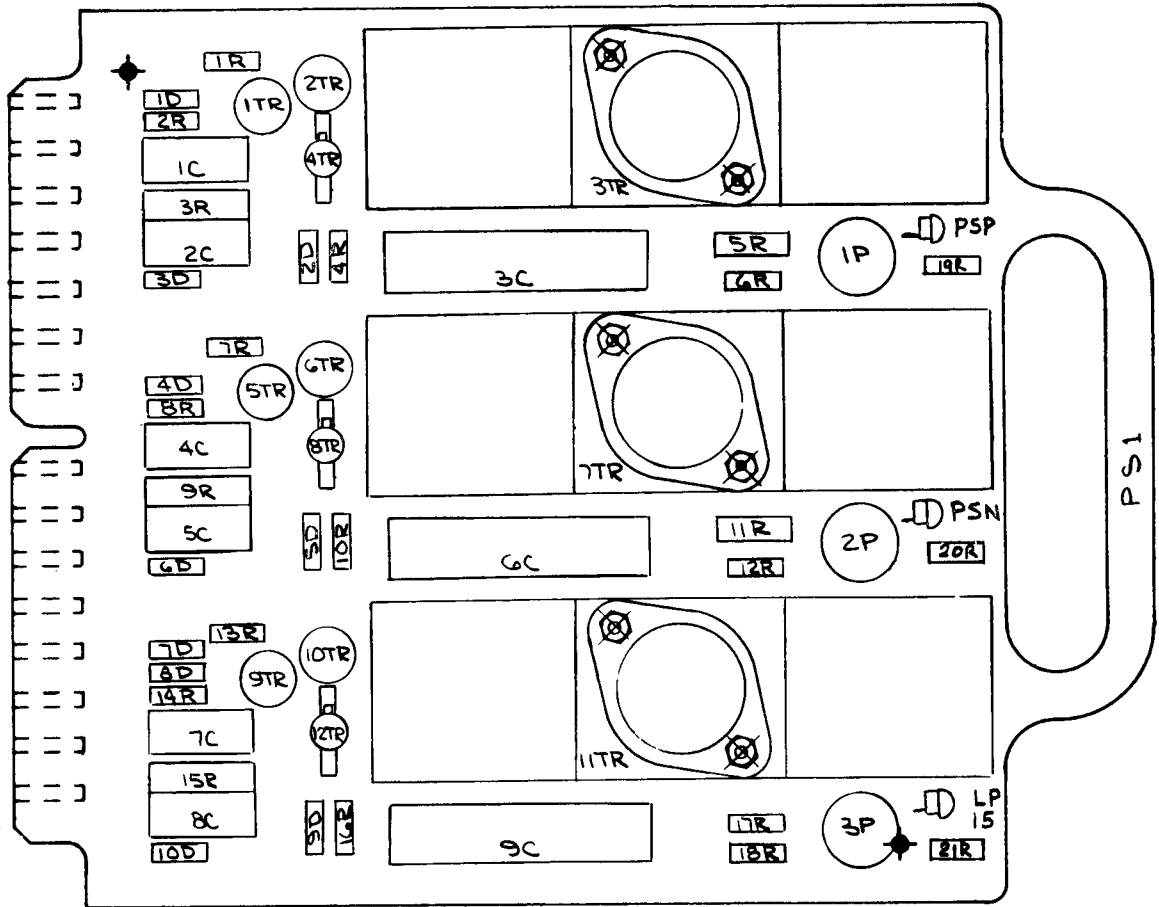


FIGURE 3