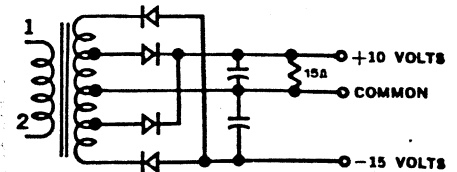
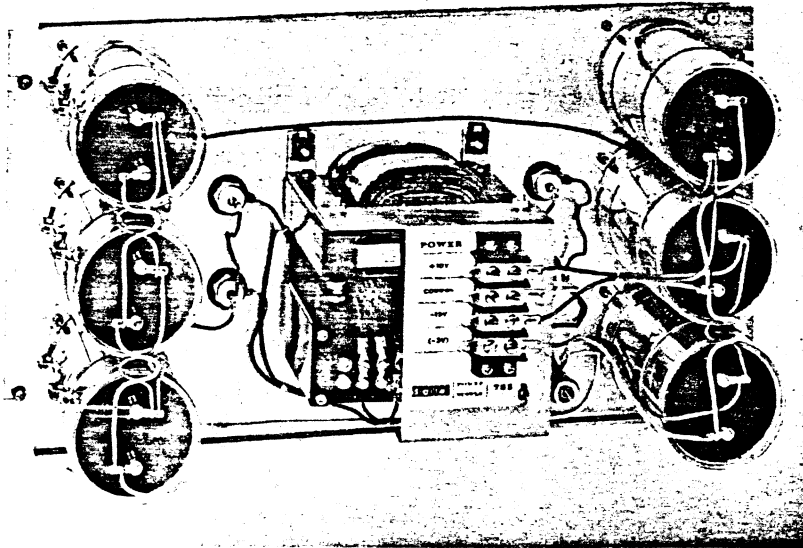


# POWER SUPPLIES

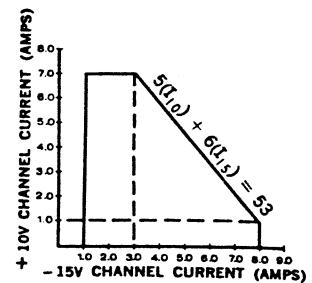
TYPES 783, 783A

+10, -15 VOLTS

MODULE  
ACCESSORIES



SIMPLIFIED SCHEMATIC TYPE 783



COMBINED LOAD OPERATING REGION

The Type 783 Power Supply (+10, -15 volt) is a simple, rugged supply capable of withstanding wide line and load variation for general systems use. The graph above shows the permissible region of operation when both outputs are used. When used singly, the 10-volt output can supply 0 to 7.5 amperes, or the 15-volt output can supply 1.0 to 8.5 amperes. It is designed for mounting in a standard 19-inch rack. The Type 783A is a 783 power supply with a 50-cycle transformer. For input voltage connections, refer to the 728A power supply.

## ELECTRICAL CHARACTERISTICS

**OUTPUT VOLTAGE:** +10 volts, -15 volts DC, floating.

**OUTPUT CURRENT:** 1) When only one output is loaded: +10 volts: 0 to 7.5 amperes, -15 volts: 1.0 to 8.5 amperes. 2) When both outputs are loaded: +10 volts: 0 to 7.0 amperes\*, -15 volts: 1.0 to 8.0 amperes\*.

At least 1.0 ampere must be drawn from the -15 volt channel to assure proper load regulation.

**LINE AND LOAD REGULATION:** The output voltage remains between -14.5 and -16.5 volts for the -15 volt output and within +9.5 and +11.5 volts for the +10 volt output, when load varies from minimum to maximum and line voltage varies from 105 to 125 volts AC.

**P-P RIPPLE:** Less than 0.7v for +10v output. Less

\*The sum of the output currents is limited by the following equation:  $5(I_{10}) + 6(I_{15}) = 53$ .

than 0.5v for -15v output. (20% more ripple on the 50-cycle type.)

**LINE FREQUENCY REGULATION:**  $\pm 2\%$  of line frequency.

## MECHANICAL CHARACTERISTICS

**PANEL WIDTH:** 19"

**PANEL HEIGHT:** 10 $\frac{1}{4}$ "

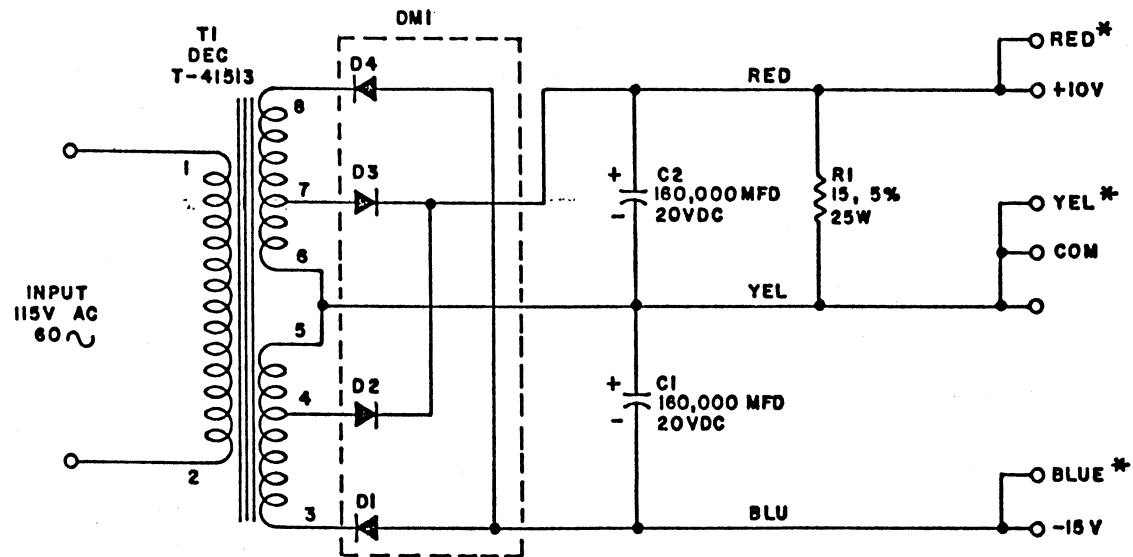
**DEPTH:** 6"

**FINISH:** Chromicoat

**POWER INPUT CONNECTION:** Screw terminals on transformer.

**POWER OUTPUT CONNECTION:** Four-terminal barrier strip with screw terminals and tabs which fit the AMP "Faston" receptacle series 250, part number 41774.

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY. COPYRIGHT 1963 BY DIGITAL EQUIPMENT CORPORATION



**NOTE:**

IN ORDER TO KEEP OUTPUT VOLTAGE WITHIN THE FOLLOWING LIMITS:

- +10V: +9.5 TO +11V
- 15V: -14.5 TO -16V

THE LOADING SHOULD BE WITHIN THE FOLLOWING LIMITS:

BOTH SIDES LOADED	+10V 0 TO 7.0 AMPS
	-15V 1.0 TO 8.0 AMPS
ONE SIDE LOADED	+10V 0 TO 7.5 AMPS
	-15V 1.0 TO 8.5 AMPS

SUM OF THE OUTPUT CURRENTS ARE LIMITED BY THE EQUATION:  $5I_{10} + 8I_{15} \leq 53$

\* HEYMAN MFG. CO. TAB TERMINALS

REVISIONS CHG NO REV 4740 2 REV & REDN 6033 C	DRN. H.W.PORTER	DATE 11-20-63	TRANSISTOR & DIODE CONVERSION CHART				EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE POWER SUPPLY 783			
	CHK'D A.VARTANIAN	DATE 11-27-63	DEC	EIA	DEC	EIA		SIZE B	CODE CS	NUMBER 783-0-1	REV C
	ENG N.DOANE	DATE 11-27-63						PRINTED CIRCUIT REV			
	PROD.	DATE									