SPECIFICATION

INTRODUCTION

The following electrical characteristics are valid over the stated environmental range for instruments calibrated at an ambient temperature of +20°C to +30°C, and after a 5-minute warmup unless otherwise noted.

Limits and tolerances given in the Supplemental Information column are provided for user information only, and should not be interpreted as Performance Requirements.

TABLE 2-1

Electrical Characteristics

Characteristic	Performance Requirement	Supplemental Information
EVENTS and START		
Input Resistance and Capacitance		1 MΩ paralleled with 20 pF (variable)
Slope	+ or −, selectable	
Sensitivity	85 mV p-p minimum at 30 MHz; 120 mV p-p minimum at 65 MHz.	
Trigger Level Range	−1.0 V to +1.0 V	
Frequency Response	0 to 65 MHz	
Pulse Width (minimum)	5 ns	
TRIG VIEW Output	At least 0.5 V	Permits viewing of all shaped triggers
Source Impedance		200 Ω or less
Trigger LEVEL IN/OUT Monitor Jack		Probe-tip jack—allows monitoring comparator voltage of preset or trigger level to within 25 mV.
Source Impedance		Approximately 1 kΩ
TRIG'D Indicator		
EVENTS	Visual indication of triggering	
START	Visual indication that start gate is open	
LEVEL Controls		
0 Volt Trigger Level		Within 30° of mechanical zero
START Pulse Lead Time		Simultaneous or ahead of the EVENTS pulse
Recycle Time	50 ns or less	Paralleling START and EVENTS INPUTS determines maximum ÷ N + 1 frequency

Table 2-1 (cont)

Characteristic	Performance Requirement	Supplemental Information
RESET	Resets start gate and events counter circuits	
EVENTS		
Delay Count Range	0 to 99999	
Throughput Time	30 ns or less	
Delayed Trigger Out		
Pulse Width (max)		Up to 6 ns greater than the events pulse width
Amplitude	At least 1 V into 50 ohms	From +0.8 to +2.2 V into 3 TTL loads (approximately 5 mA)
Source Impedance		Logic 1 approximately 50 ohms Logic Ø approximately 200 ohms
TRIG'D Indicator	Indicates trigger out	

Physical Characteristics

Size	Fits all TM 500-Series power module plug-in compartments. (See Fig. 2-1.)	
Weight	716.5 grams (1.58 pounds)	

Environmental Characteristics

Refer to the specification for the associated power module.

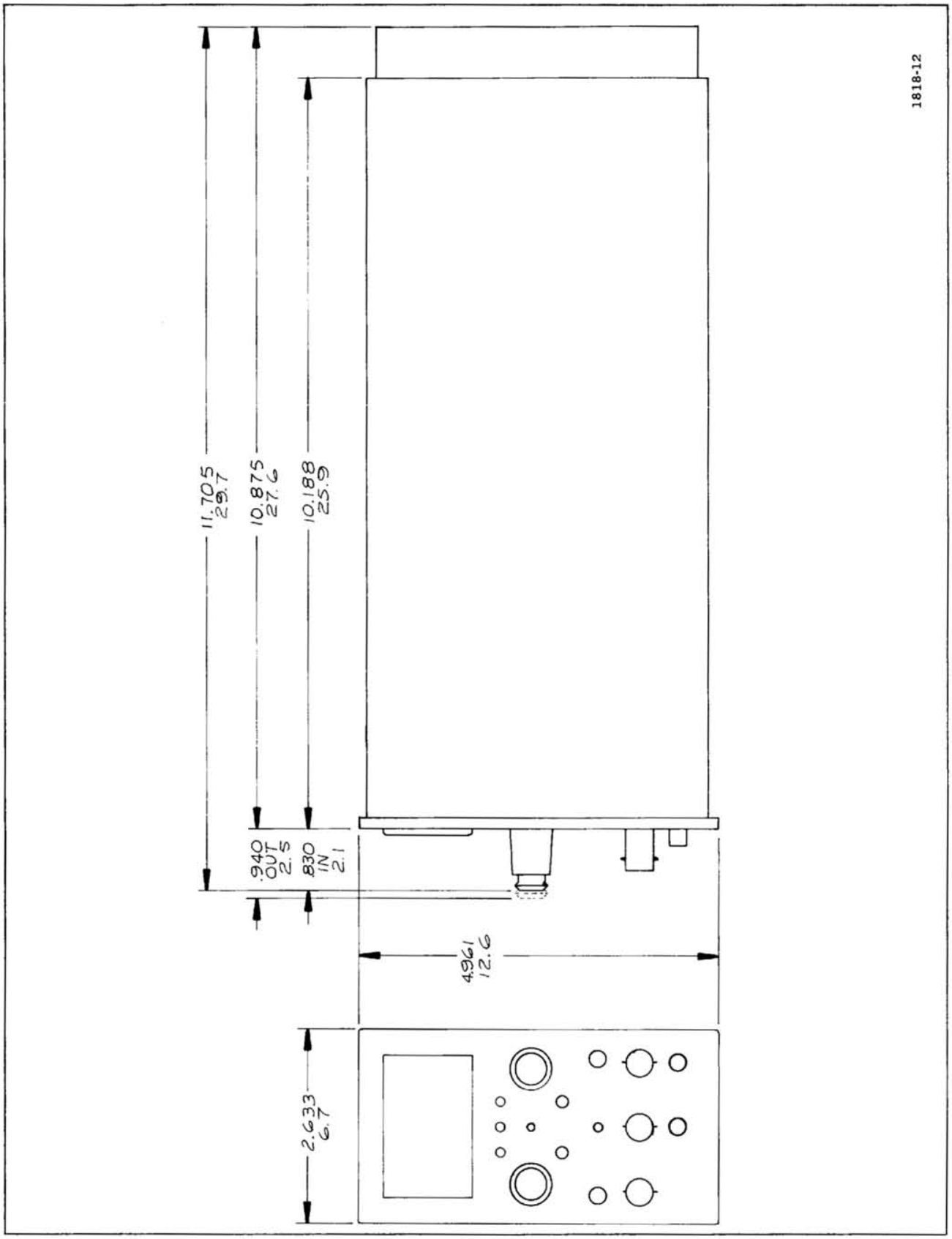

Fig. 2-1. DD 501 Dimensional Drawing.