

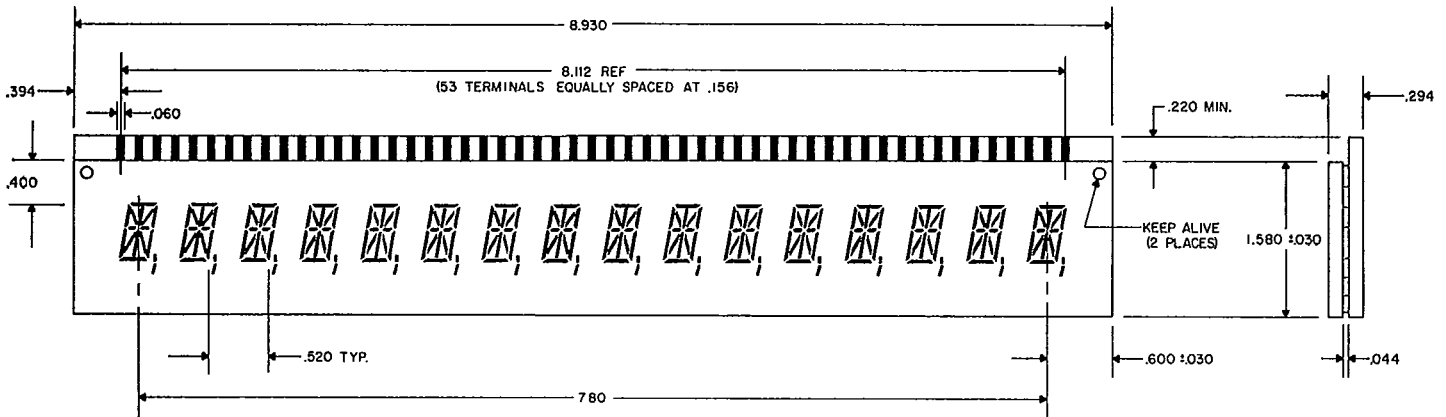


T-41-35

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AR16501 - ALPHANUMERIC (1/2 inch high) Display

The AR16501 display is a sixteen character, fourteen segment alphanumeric display with decimal points and commas. It is very bright and readable in most ambient conditions. Its very thin and flat profile, with a limited number of connections, simplifies equipment design and assembly.



FEATURES

- All Glass Construction
- Minimal Connections
- Sunlight Readable
- High Reliability
- Completely Flat Design
- Neon Orange Color
- Excellent Contrast
- Wide Viewing Angle (140°)
- Thin Package (.3 inch)
- Low Power Consumption

PIN OUT

Pin		Pin		Pin	
1	Left KA Anode	19	Anode No. 6	37	J Cathode
2	Left KA Cathode	20	C Cathode	38	E Cathode
3	Anode No. 1	21	R Cathode	39	Anode No. 12
4	N Cathode	22	Anode No. 7	40	D Cathode
5	H Cathode	23	B Cathode	41	H Cathode
6	Anode No. 2	24	P Cathode	42	Anode No. 13
7	M Cathode	25	Anode No. 8	43	B Cathode
8	Decimal Cathode	26	Comma Cathode	44	C Cathode
9	Anode No. 3	27	NC	45	G Cathode
10	K Cathode	28	Comma Cathode	46	Anode No. 14
11	D Cathode	29	Anode No. 9	47	Decimal Cathode
12	Anode No. 4	30	N Cathode	48	R Cathode
13	A Cathode	31	M Cathode	49	Anode No. 15
14	J Cathode	32	Anode No. 10	50	P Cathode
15	E Cathode	33	A Cathode	51	Anode No. 16
16	Anode No. 5	34	K Cathode	52	KA Cathode
17	G Cathode	35	F Cathode	53	Right KA Anode
18	F Cathode	36	Anode No. 11		

Electrical Specifications

Parameter	Min.	Typ.	Max.
Anode Supply Voltage (1) (VDC)	170	180	
Anode Voltage Swing (VDC)		60	
Anode-to-Cathode Voltage Drop (2) (VDC)		150	
Cathode Voltage Swing (typical anode supply voltage and segment current) (VDC)	50	80	
Cathode Current Segment b (1/20 duty cycle) (3) (mAdc)	1.25	1.80	2.30
Keep Alive (4) (mAdc)	25	50	100
Anode On Time (mms)	200	350	
Interdigit Blanking Time (2) (mms)	25	40	50
Refresh Period (4) (mms)			10
Operating Temperature (°C)	- 10		+ 70
Storage Temperature (°C)	- 40		+ 70

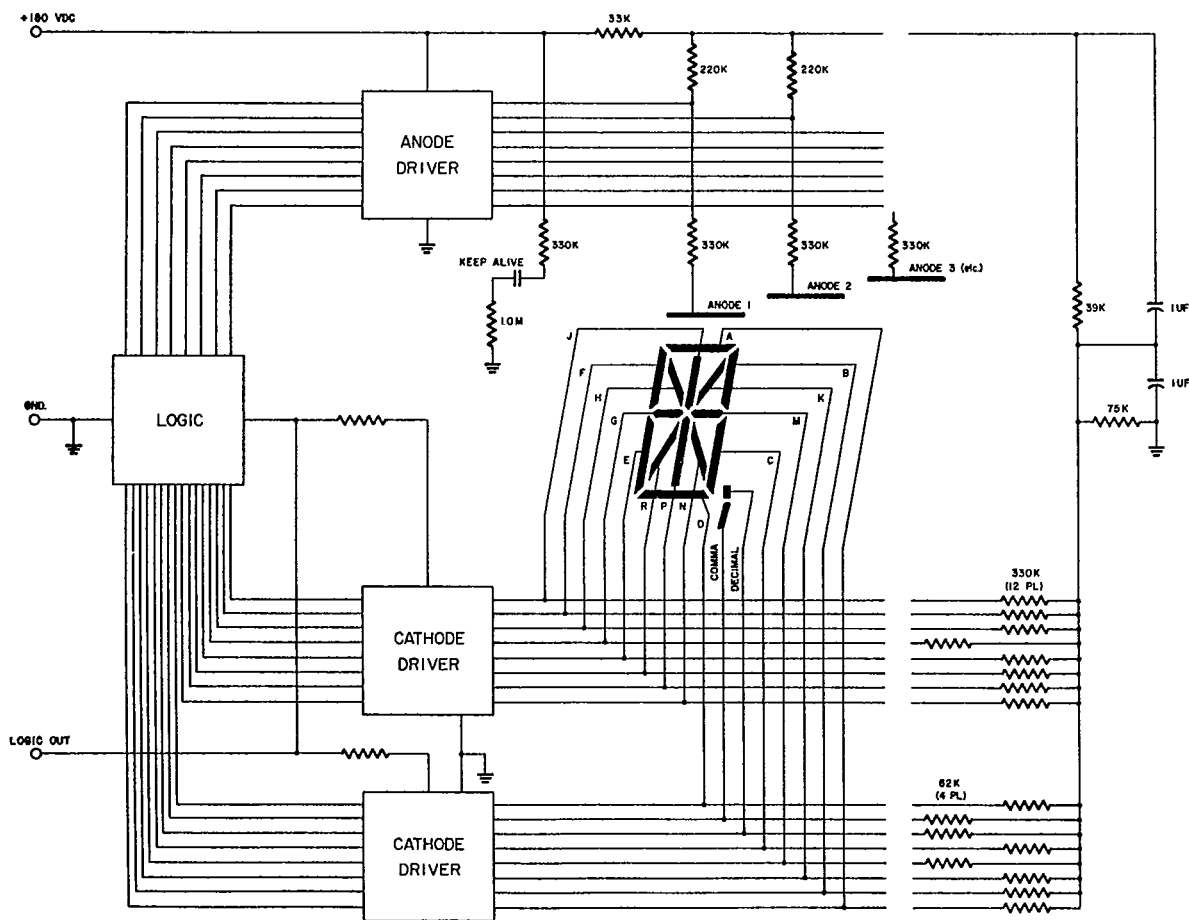
General Environmental Data

- Operating Altitude 0 to 70,000 ft.
- Operating Temperature 0° to 55° C
- Storage Temperature - 40° to + 85° C
- Relative Humidity (no cond.) 85% Max.
- Shock 50g ½ sinewave for 11 ms
- Vibration 2g, 50 to 2000 HZ

Notes:

1. Maximum voltage generally depends on breakdown voltage of cathode drivers. For example, with 80 volt breakdown devices, supply voltage should be limited to 200 volts.
2. Cathode current at segment b of 1.8 mAdc, 1/20 duty cycle.
3. For uniform segment brightness, currents should be proportionally set according to respective segment areas. Ratio other segments against segment b (the minimum current specified for segment b is the lowest which will produce an even glow).
4. Keep alive is recommended for all circuits, but required if refresh period exceeds 3 ms.

The AR16501 display is made for multiplexed operation. Anode and cathode drivers are available including Spragues UDN6184 and UDN7184 and Dionics DI-510 and DI-232. A typical driving circuit is shown below.



Displays, Inc. can also supply custom screen printed displays if you have a specific need not met by any of our standard displays. Please call your local Displays, Inc. representative or our plant for your specific requirements.