

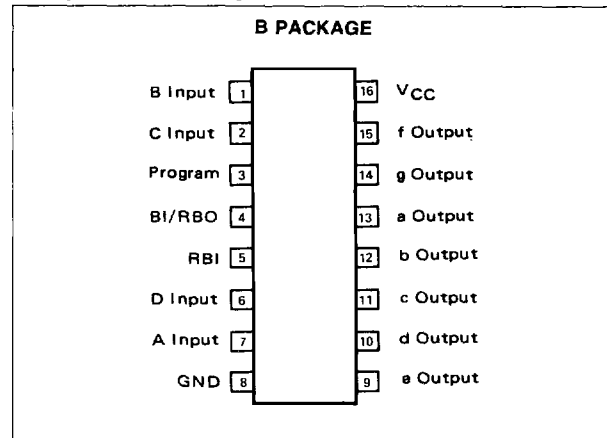
FEATURES

- CURRENT SOURCE OUTPUTS
- ADJUSTABLE OUTPUT CURRENT — 0.2 TO 1.5 mA
- HIGH OUTPUT BREAKDOWN VOLTAGE — 110V TYP
- SUITABLE FOR MULTIPLEX OPERATION
- BLANKING AND RIPPLE BLANKING PROVISIONS
- LOW FAN-IN AND LOW POWER

TRUTH TABLE

DECIMAL OR FUNCTION	RBI	D	C	B	A	BI/RBO	a	b	c	d	e	f	g	DISPLAY
0	1	0	0	0	0	1	0	0	0	0	0	1	1	
1	X	0	0	0	1	1	1	0	0	1	1	1	1	
2	X	0	0	1	0	1	0	0	1	0	0	1	0	
3	X	0	0	1	1	1	0	0	0	0	1	1	0	
4	X	0	1	0	0	1	1	0	0	1	1	0	0	
5	X	0	1	0	1	1	0	1	0	0	1	0	0	
6	X	0	1	1	0	1	0	1	0	0	0	0	0	
7	X	0	1	1	1	1	0	0	0	1	1	1	1	
8	X	1	0	0	0	1	0	0	0	0	0	0	0	
9	X	1	0	0	1	1	0	0	0	0	1	0	0	
10	X	1	0	1	0	1	0	0	0	1	0	0	0	
11	X	1	0	1	1	1	1	1	0	0	0	0	0	
12	X	1	1	0	0	1	0	1	1	0	0	0	1	
13	X	1	1	0	1	1	1	0	0	0	0	1	0	
14	X	1	1	1	0	1	0	1	1	0	0	0	0	
15	X	1	1	1	1	1	0	1	1	1	1	0	0	
B1	X	X	X	X	X	0	1	1	1	1	1	1	1	
RBI	0	0	0	0	0	0	1	1	1	1	1	1	1	

PIN CONFIGURATION

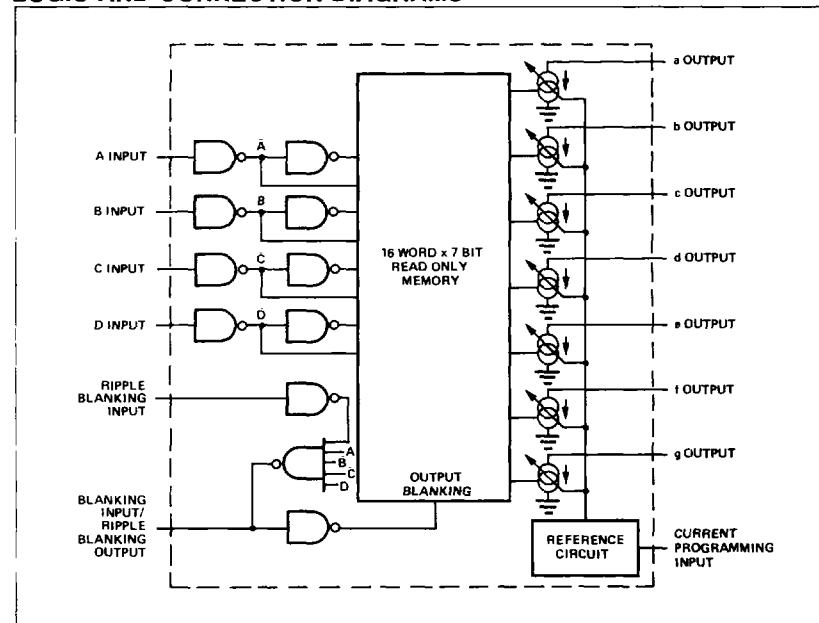


ABSOLUTE MAXIMUM RATINGS

VCC	7V
Input Voltage (Except B1)	6V
Input Voltage (B1)	VCC
Power Dissipation (Note 1)	600mW
Operating Temperature Range	0°C to 70°C
Storage Temperature Range	-65°C to 150°C
Lead Temperature (Soldering, 10 sec)	300°C

Note 1: Min/max limits apply across the guaranteed operating temperature range of 0°C to 70°C unless otherwise specified. Typicals are for VCC = 5V, TA = 25°C. Positive current is defined as current into the referenced pin.

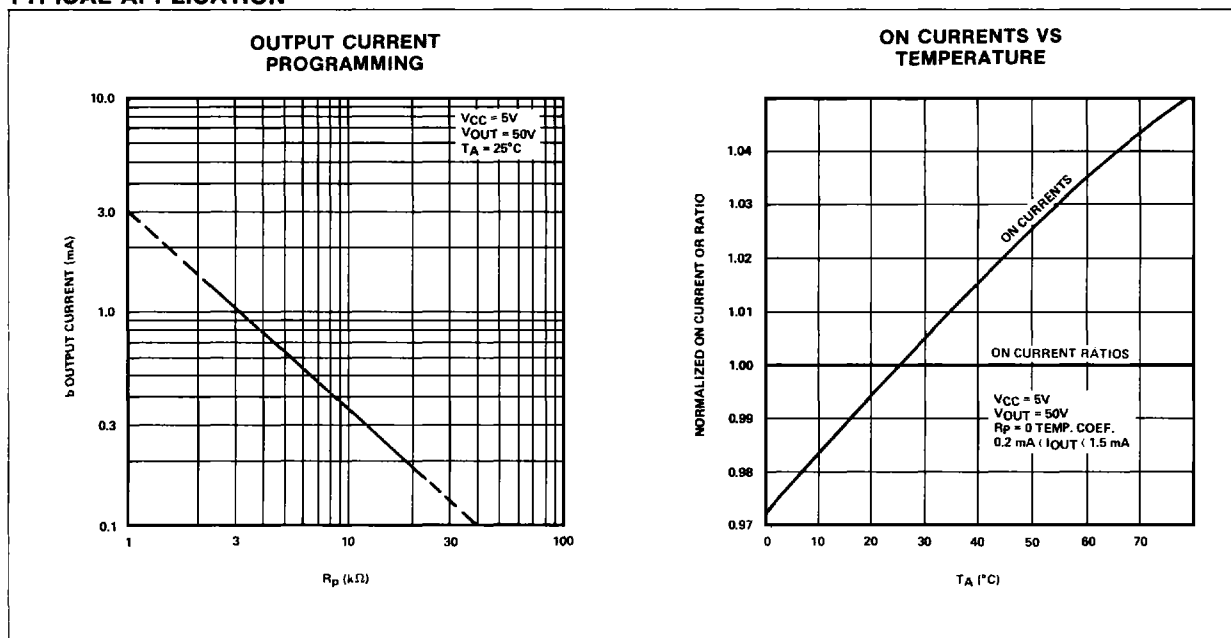
LOGIC AND CONNECTION DIAGRAMS



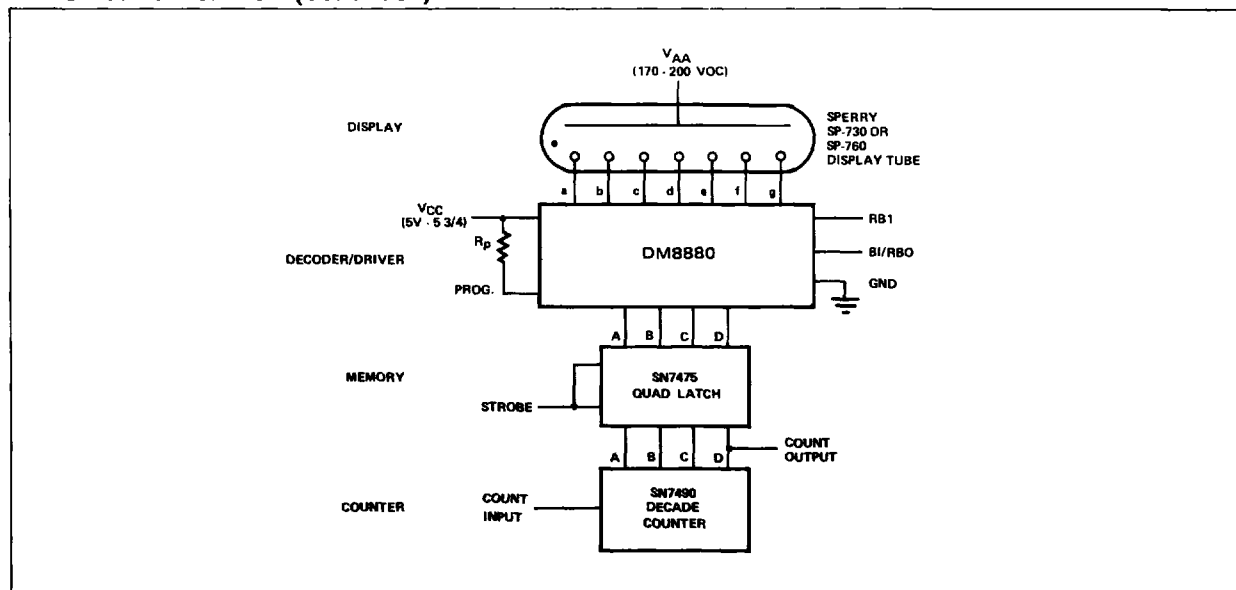
SWITCHING CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Segment Outputs:					
Outputs a, f, g On Current Ratio	All Outputs = 50V, Output b Curr. = Ref.	0.88	0.93	0.98	
Output c On Current Ratio	All Outputs = 50V, Output b Curr. = Ref.	1.19	1.25	1.31	
Output d On Current Ratio	All Outputs = 50V, Output b Curr. = Ref.	0.95	1.00	1.05	
Output e On Current Ratio	All Outputs = 50V, Output b Curr. = Ref.	1.04	1.10	1.16	
Output b On Current	VCC = 5V, VOUT b = 50V, TA = 25°C, RP = 18.1k	0.18	0.20	0.22	mA
	VCC = 5V, VOUT b = 50V, TA = 25°C, RP = 7.03k	0.45	0.50	0.55	mA
	VCC = 5V, VOUT b = 50V, TA = 25°C, RP = 3.40k	0.90	1.00	1.10	mA
	VCC = 5V, VOUT b = 50V, TA = 25°C, RP = 2.20k	1.45	1.50	1.65	mA
Output Saturation Voltage	VCC = 4.75V, IOUT = 2mA, RP = 1k ±5%		0.8	2.5	V
Output Leakage Current	VOUT = 75V, BI = 0V		.003	3	μA
Output Breakdown Voltage	IOUT = 250μA, BI = 0V	80	110		V
Propagation Delays:					
BCD Input to Segment Output	VCC = 5V, TA = 25°C		0.4	10	μS
BI to Segment Output	VCC = 5V, TA = 25°C		0.4	10	μS
RBI to Segment Output	VCC = 5V, TA = 25°C		0.7	10	μS
RBI to RBO	VCC = 5V, TA = 25°C		0.4	10	μS

TYPICAL APPLICATION



TYPICAL APPLICATION (Continued)



INTERFACE