

BABCOCK**MODEL: DI04702**

DISPLAY PRODUCTS DIVISION

0.7" (17,8 mm), 4-DIGIT, GAS-PLASMA DISPLAY

Babcock's 4-Digit, 7-segment, Gas-Plasma Display is designed for coin-op pinball games. The flat display has a wide viewing angle and a bright neon-orange output and is easily read at distances up to 35 feet (10 meters). Legibility is assured by the 0.7-inch-high numbers, and bright, 230 fL (788 cd/m²) output. The display has an attached, hermetically sealed, lead system for added protection in humid environments.

In most applications, this part is a direct substitute for any of the following industry standard models:

CROSS REFERENCE GUIDE

CHERRY	DISPLAY'S INC
104-1W70	AR04702

FEATURES

- 0.7 inch (17.8 mm) digit height
- Numeric, 7-segment digits
- 4-digit field width
- Superior lead integrity and reliability
- Luminance – 230 fL (788 cd/m²) at 1/6 duty cycle

SPECIFICATIONS*Absolute Maximum Ratings*

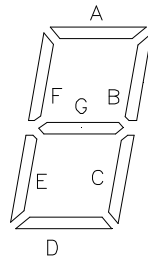
PARAMETER	MIN	MAX	UNITS
Voltage Differential between any to terminals		250	V(dc)
Current (Duty Cycle =)		5	mA
Storage Temperature	-40	+85	°C
Operating Temperature	0	70	°C

Recommended Operating Conditions

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Anode Supply Voltage	Vbb	170	180	210	V(dc)
Anode Voltage Swing			60		V(dc)
Anode to Cathode Voltage Drop at I _k (TYP)	V _{op}		150		V(dc)
Current, "b" segment (Duty Cycle = 1/6)(1)	I _k	3.6	4.1	4.5	mA
Current, "b" segment (Duty Cycle = 1/7)(2)	I _k	3.0	3.4	3.8	mA
Current, Keep-alive (3)	I _{ka}	50	100	150	μA
Anode on-time		2.8			ms
Interdigit Blanking (Duty Cycle = 1/6)			400		μs
Refresh Period (4)			17		ms
Initial Ionization Time				5	Sec

- (1) Typical Luminance is 230 fL (788 cd/m²) at 1/6 duty cycle.
- (2) Typical Luminance is 210 fL (720 cd/m²) at 1/7 duty cycle.
- (3) Use of the Keep-alive cathode is recommended for multiplexed operation
- (4) Scan direction is from left-to-right.

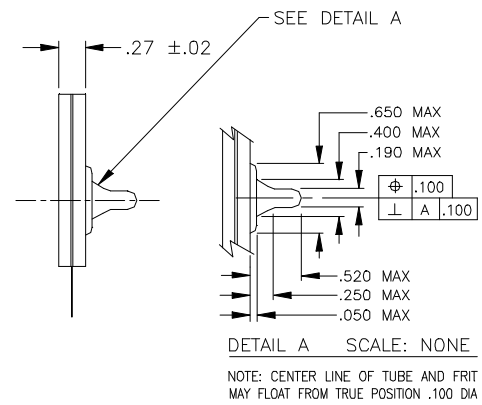
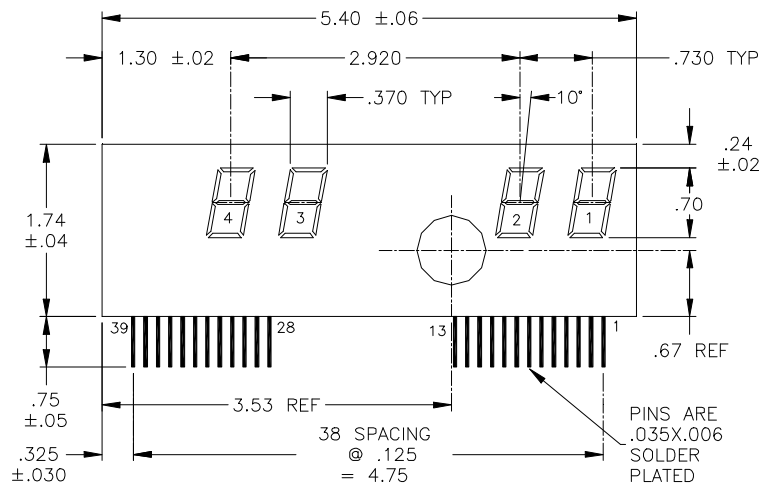
SPECIFICATIONS ARE FOR REFERENCE ONLY



DIGIT DETAIL
SCALE: NONE

Terminal Assignments

Terminal No.	Segment/Function	Terminal No.	Segment/Function
1	A, Right Pair	20-27	N/C
2	Anode-1	28	Anode-3
3	B, Right Pair	29	A, Left Pair
4	G, Right Pair	30	B, Left Pair
5	C, Right Pair	31	K.A. Anode (L)
6	K.A. Anode (R)	32	Anode-4
7	K.A. Cathode (R)	33	C, Left Pair
8	Anode-2	34	K.A. Anode (L)
9	D, Right Pair	35	D, Left Pair
10	E, Right Pair	36	E, Left Pair
11,12	N/C	37	G, Left Pair
13	F, Right Pair	38	N/C
14-19	N/C	39	F, Left Pair



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