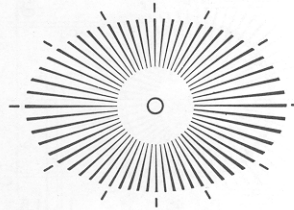


FLUORESCENT INDICATOR PANEL FIP60B30T

CHARACTER FORMAT



(SIZE 7/9)

FEATURES

Compatible with MOS LSI.

APPLICATIONS

Analogue clock and other analogue display equipments.

OPERATION MODE

FIP60B30T is designed for a multiplexed drive mode.

MECHANICAL DATA

External Dimensions, Terminal, Shape and Size of a Digit See attached drawing

Operating Temperature Range -10 to +60 °C

Storage Temperature Range -40 to +70 °C

Weight 70 g approx.

Mounting Position Any

OPTICAL DATA

Color Green

Brightness 690 cd/m²
(200 ft.L)

ELECTRICAL DATA

	E _f	e _b	e _c	Du*	t _p **	t _b	f	E _{cco}	E _{bco}	L
	UNIT Vac	Vp-p	Vp-p	—	μs	μs	Hz	Vdc	Vdc	cd/m ² (ft.L)
Maximum Ratings	MAX. 3.0	40	18	1/2	—	—	—	—	—	—
	MIN. 2.5	—	—	—	40	10	300	—	—	—
Typical Operation	TYP. 2.7	30	15	1/3	100	10	3 × 10 ³	-3	-3	690 (200)

*effective value
**without blanking duration

ELECTRICAL CHARACTERISTICS

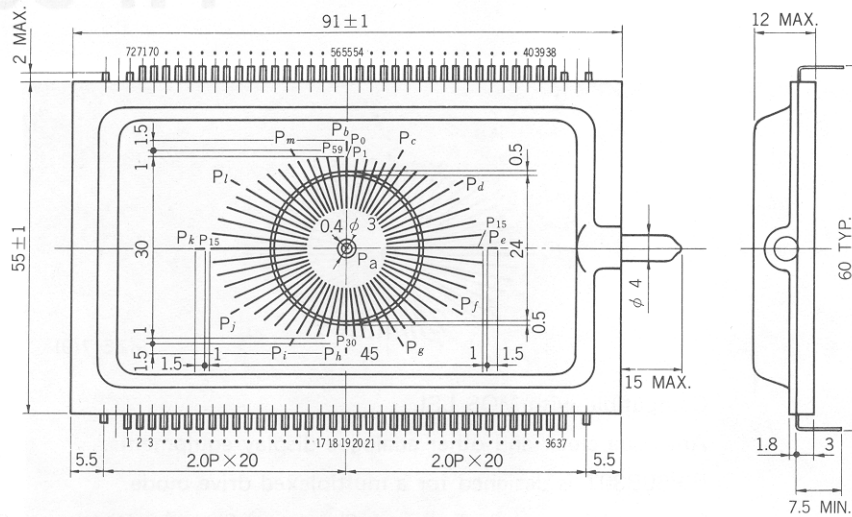
(Test circuit is specified by FEB-1001)

ITEM	SYMBOL	CONDITION	TOLERANCE			UNIT
			MIN.	NOM.	MAX.	
Filament Current	I _f	E _f =2.7 Vac, e _b =e _c =0	175	196	215	mAac
Anode Current	i _b	E _f =2.7 Vac e _b =30 Vp-p e _c =15 Vp-p Du=1/3 t _p =100 μs All segments are lit.	—	0.9	1.5	mAp-p
Grid Current	i _c /1G		—	10	18	mAp-p
	i _c /2G		—	4.5	8	
Brightness	L		340 (100)	690 (200)	—	cd/m ² (ft.L)
Brightness Ratio Between Digit	L MIN./L MAX.		50	—	—	%
Anode Cut-off Voltage	E _{bco}	E _f =2.7 Vac, e _c =15 Vp-p Du=1/3, t _p =100 μs, All segments are lit.	-1	—	—	Vdc
Grid Cut-off Voltage	E _{cco}	E _f =2.7 Vac, E _b =30 Vdc, All segments are lit.	-3	—	—	Vdc

Note 1: These values are specified when e_b and e_c are supplied from the center tap of the filament transformer, and also specified at 25 °C

Note 2: These current values are specified when the segments (the longest bar segment, panel center segment, and scale-segments around the circular bars) are lit.

Fig. 1 OUTLINE DRAWING (Unit : mm)

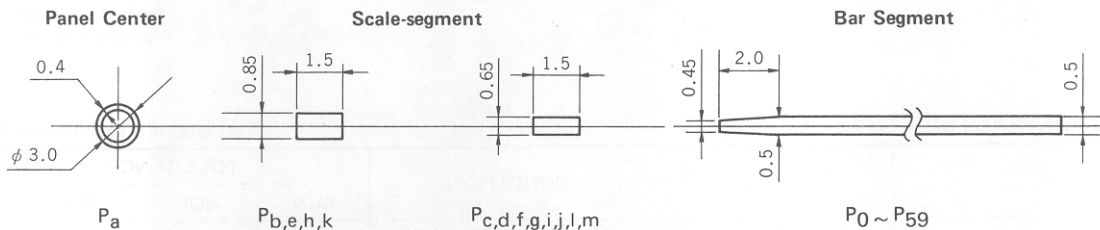


1G: outer Grid
2G: inner Grid

TERMINAL CONNECTION

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Electrode	F	P _{a-m}	P ₄₅	P ₄₄	P ₄₃	1G	P ₄₂	P ₄₁	P ₄₀	P ₃₉	P ₃₈	P ₃₇	P ₃₆	P ₃₅	P ₃₄	P ₃₃	P ₃₂	P ₃₁	1G	P ₃₀	P ₂₉	P ₂₈	P ₂₇	P ₂₆	P ₂₅
Terminal No.	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Electrode	P ₂₄	P ₂₃	P ₂₂	P ₂₁	P ₂₀	P ₁₉	1G	P ₁₈	P ₁₇	P ₁₆	2G	F	NC	P ₁₅	P ₁₄	P ₁₃	1G	P ₁₂	P ₁₁	P ₁₀	P ₉	P ₈	P ₇	P ₆	P ₅
Terminal No.	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72			
Electrode	P ₄	P ₃	P ₂	P ₁	1G	P ₀	P ₅₉	P ₅₈	P ₅₇	P ₅₆	P ₅₅	P ₅₄	P ₅₃	P ₅₂	P ₅₁	P ₅₀	P ₄₉	1G	P ₄₈	P ₄₇	P ₄₆	NC			

Fig. 2 SEGMENT PATTERN (Unit : mm)



NOTE FOR USAGE

1. The panel display "FIP" is composed mainly of high quality glass, and so careful handling should be taken.
2. The connecting section between the panel and the lead wires must be free from extreme tensile and bending stresses.
3. When mounting the panel display and equipment, the surface should be utilized except for the exhaust tube and connecting section.
4. The panel display "FIP" should be utilized with green color filter to obtain a good display appearance, and also filterable to red, orange and yellow.
5. Subject to change without any notice.