

SANYO

ENGINEERING SPECIFICATIONS

CFP-39-1

(TENTATIVE)

REPLACEMENT DU LCD DU 3003

TOTTORI SANYO ELECTRIC CO., LTD.
ELECTRONIC DEVICE BUSINESS HEADQUARTERS
LIQUID CRYSTAL DISPLAY DIVISION

3-201, Minami-yoshikata, Tottori-shi, 680 Japan

TEL: 0857(21)2140

FAX: 0857(21)2162

4

1 3

HISTORY OF CHANGES

DATE	REVISION NO.	PAGE	DESCRIPTIONS

NOTE

1. ELECTRICAL FEATURES

1-1. Absolute Maximum Ratings

Item	Sym.	Limits	Unit	Notes
Input voltage	V _{in}	16.5	V	
Operating temperature	T _{op}	0 ~ 50	°C	
Storage temperature	T _{stg}	-20 ~ 75	°C	
Relative humidity	RH	90	%	

1-2. Electrical Characteristics Ta=25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Notes
Input voltage	V _{in}	8.0	12.0	16.0	V	
Input current	I _{in}	150	175	200	mA	V _{in} =12V
Power consumption	P _c	—	2.1	—	W	V _{in} =12V
Non-load output voltage	V _s	—	1000	—	V _{o-p}	V _{in} =12V
Lamp current	I _L	4.5	5.0	5.5	mA _{rms}	V _{in} =12V Max. brightness control
Driving frequency	f	24	28	32	KHz	V _{in} =12V Max. brightness control

Max. brightness control : When resistance value between 1 and 2 pins of CN1 is 0 (Ω).

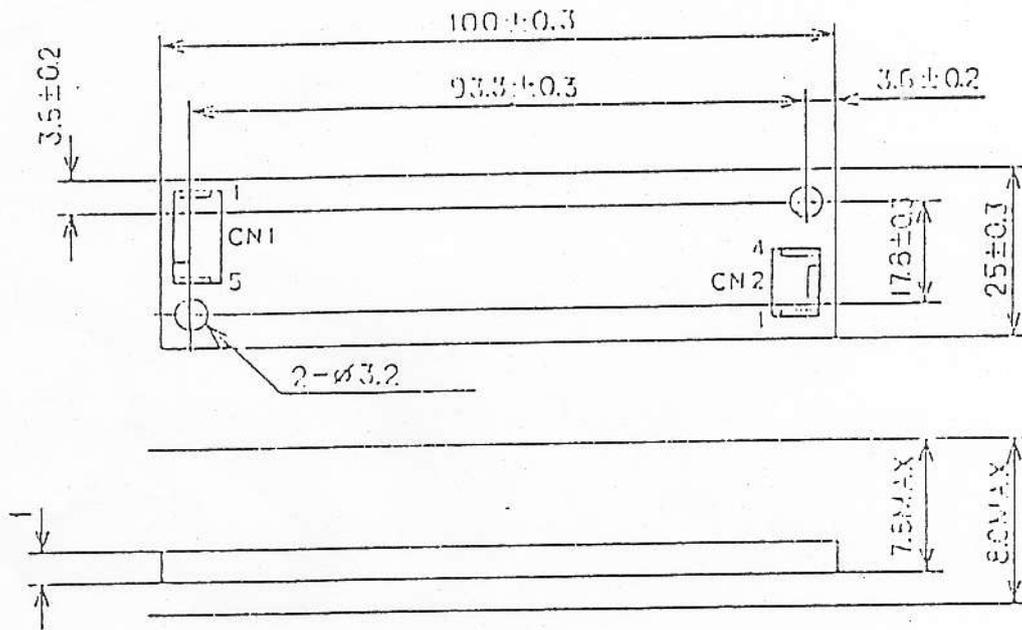
1-3. Measuring circuit

Refer to the following "Measuring Circuit".

1-4. Suitable load

Cold fluorescent lamp HMBS030A51W101

2. External Dimension



UNIT : mm

3. Connector

CN No.	Name	Type	Maker	Suitable Housing	Maker
CN1	Side SMT	DF3-5P-2H	HRS	DF3-5S-2C	HRS
CN2	Side SMT	DF3-4P-2H	HRS	DF3-4S-2C	HRS

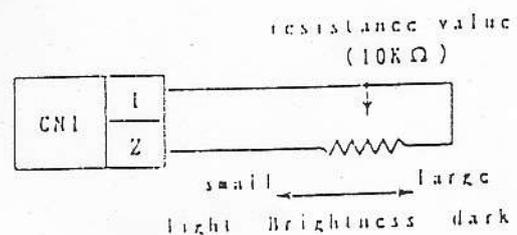
4. Connector Terminal

CN No.	Pin No.	Signal
CN1	1	VR(H) (10KΩ)
	2	VR(L) (10KΩ)
	3	CNT
	4	GND
	5	Vin (12V DC)
CN2	1	OUT PUT (AC)
	2	—
	3	—
	4	OUT PUT (AC)

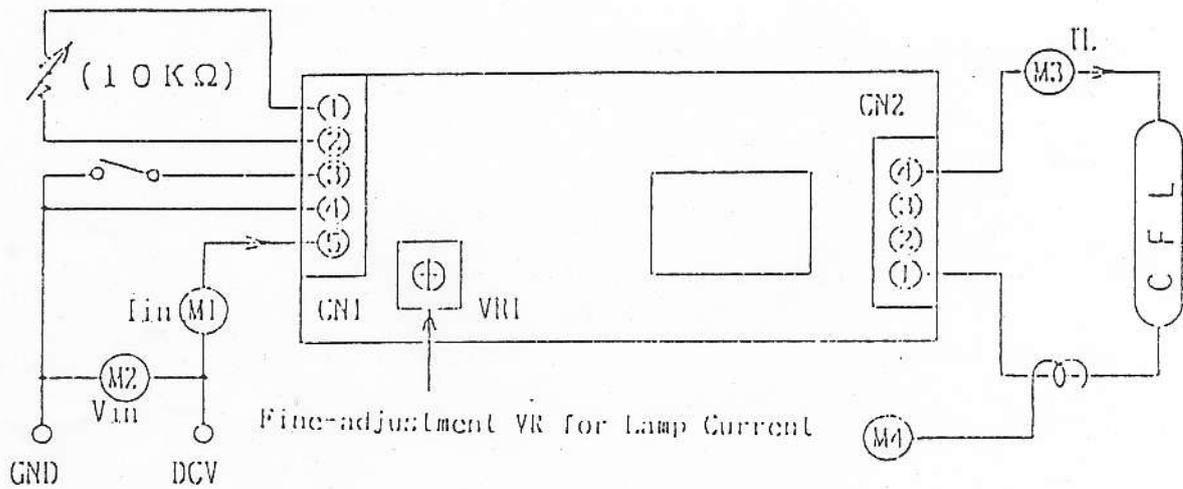
5. Operation Table

CNT	Operation
II (Vin)	OFF
T (OPEN)	
I. (GND)	ON

6. Connection of volume for brightness control



7. Wiring Diagram and Measuring Circuit



Load ----- HMB048A17W228

Measuring parts M1 --- DC ammeter (0.5 class equipment)

M2 --- DC voltmeter (0.5 class equipment)

M3 --- High frequency ammeter (YEW2016 or equipment)

M4 --- Frequency counter

8. Measured Items

ITEM	SYM.	UNIT	DESCRIPTION
Input voltage	V_{in}	V	voltage between input terminals
Input current	I_{in}	mA	current flowing into input terminals
Driving frequency	f	KHz	Trans. oscillation frequency when CFL is lit
Lamp current	I_L	mArms	r.m.s of current flowing into CFL
Starting voltage	E_z	V	input voltage when the discharge of CFL started, increasing circuit voltage gradually.
Open output voltage (non-load output voltage)	V_s	V_{o-p}	output voltage at non-load or output voltage of trans.

Circuit Diagram

