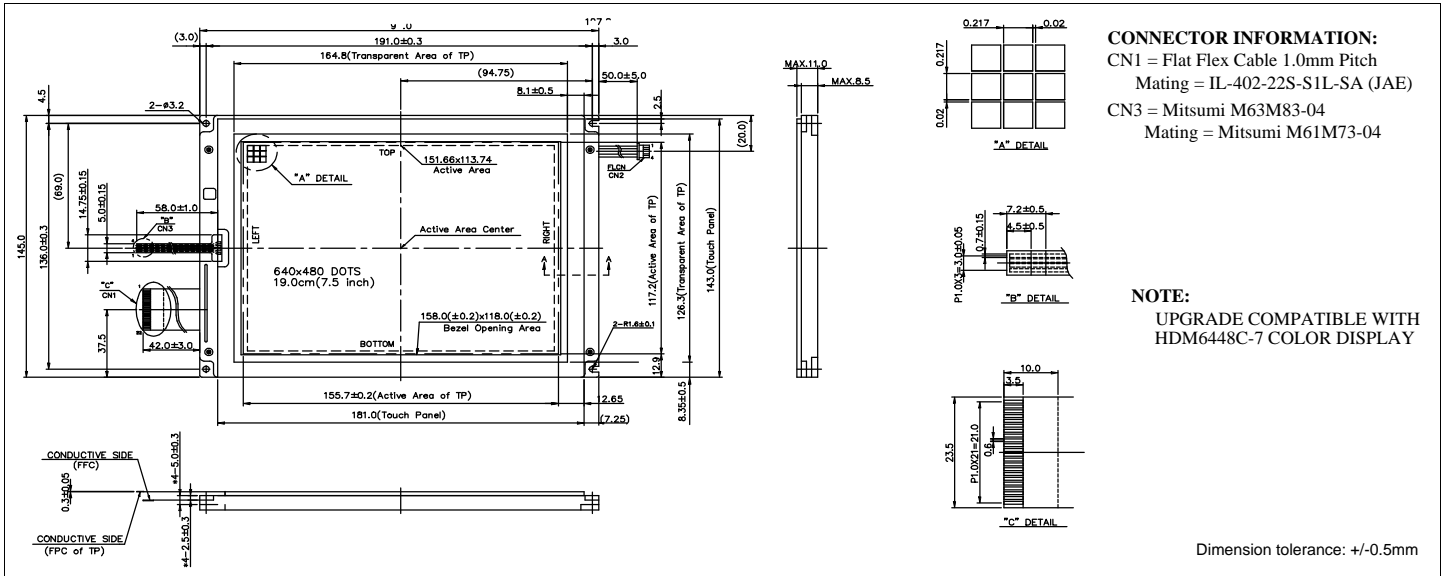


# HDM6448-7

## Dimensional Drawing

640 X 480 7.5" VGA Single scan Mono STN display



### Features

Backlight.....CCFL  
Options.....Touch Panel  
Built-in Controller.....None

### Physical Data

Module Size.....197.0W x 145.0H x 11.0T mm  
Viewing Area Size.....158.0W x 118.0H mm  
Dot Pitch.....0.237W x 0.237H mm  
Dot Size.....0.217W x 0.217H mm  
Weight.....371g

### Electrical Characteristics (VDD=3.3±0.25V, Ta=25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE	V <sub>DD</sub>	-	2.7	3.3	5.5	V
	V <sub>EE</sub>	-	37.1	37.4	37.7	V
POWER SUPPLY CURRENT	I <sub>DD</sub>	V <sub>DD</sub> =3.3V	-	0.5	-	mA
	I <sub>EE</sub>	V <sub>EE</sub> =37.4V	-	23.2	-	mA
INPUT HIGH VOLTAGE	V <sub>IH</sub>	-	0.8V <sub>DD</sub>	-	V <sub>DD</sub>	V
INPUT LOW VOLTAGE	V <sub>IL</sub>	-	0	-	0.2V <sub>DD</sub>	V
CCFL OP. VOLTAGE	V <sub>FL</sub>	I <sub>FL</sub> =5mArms	-	380	-	V <sub>rms</sub>
CCFL OP. CURRENT	I <sub>FL</sub>	V <sub>FL</sub> =520V	4.0	5.0	6.0	mA
CCFL START VOLTAGE	V <sub>FLS</sub>	Ta=0°C	-	600	-	V <sub>rms</sub>
BRIGHTNESS	-	-	-	200	-	NIT
DRIVE METHOD	1/240 DUTY					

### Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	7.0	V
SUPPLY VOLTAGE FOR LCD	V <sub>EE</sub> -V <sub>SS</sub>	0	42.0	V
CCFL OPERATING VOLTAGE	V <sub>FL</sub>	-	1500	V <sub>rms</sub>
CCFL OPERATING CURRENT	I <sub>FL</sub>	-	6.0	mArms
OPERATING TEMPERATURE	T <sub>OP</sub>	0	50	°C
STORAGE TEMPERATURE	T <sub>STG</sub>	-20	70	°C
HUMIDITY (NO CONDENSATION)	-	10	85	%RH

### Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	FLM	H	First Line Marker
2	V <sub>SS</sub>	0V	Ground
3	CL1	H/L	Data latch signal
4	V <sub>SS</sub>	0V	Ground
5	CL2	H/L	Data Shift clock
6	V <sub>SS</sub>	0V	Ground
7	D0	H/L	Display data
8	D1	H/L	
9	D2	H/L	
10	D3	H/L	
11	D4	H/L	
12	D5	H/L	
13	D6	H/L	
14	D7	H/L	
15	DISP	H/L	H=Display on, L=Display off
16	V <sub>DD</sub>	3.3V	Power supply for logic
17	V <sub>DD</sub>	3.3V	Power supply for logic
18	V <sub>SS</sub>	0V	Ground
19	V <sub>EE</sub>	36.5V	Power supply for LCD
20	V <sub>SS</sub>	0V	Ground
21	TS1	-	Temperature Sensor pin 2
22	TS2	-	Temperature Sensor pin 2

### CCFL Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V <sub>FL</sub>	-	Power supply for CCFL
2	NC	-	No Connection
3	NC	-	No Connection
4	V <sub>FLG</sub>	-	Ground

### Touch Panel Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	Y-	-	Right
2	X-	-	Bottom
3	Y+	-	Left
4	X+	-	Top