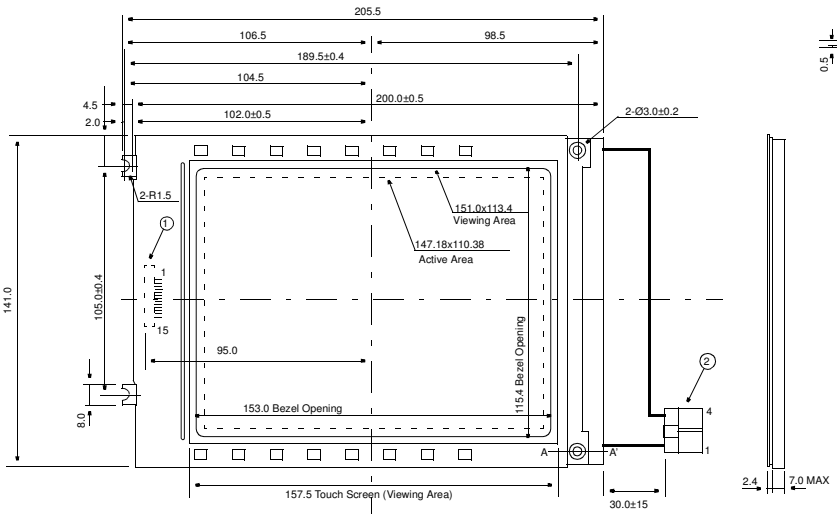
HDM6448-S

640 X 480 7.4" VGA Monochrome

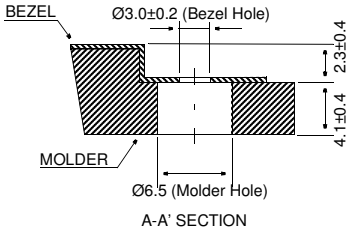
Dimensional Drawing



CONNECTOR INFORMATION:

LCD
DISPLAY: 52271-1590 (MOLEX)
(FFC type)

CCFL
DISPLAY: M63M83-04 (MITSUMI)
MATING: M60-04-30-114P (MITSUMI)



Dimension tolerance: +/-0.3mm

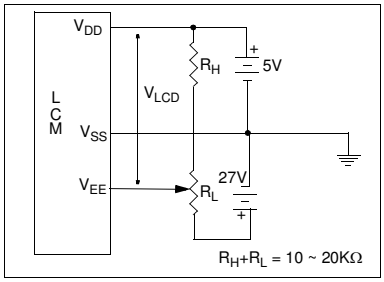
Features

Backlight.....CCFL
Options.....Black and White FSTN
Built-in Controller.....None

Physical Data

Module Size.....205.5W x 141.0H x 7.0T mm
Viewing Area Size.....151.0W x 113.4H mm
Dot Pitch.....0.23W x 0.23H mm
Dot Size.....0.21W x 0.21H mm

Power Supply



Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V_{DD}-V_{SS}	-0.3	6.5	V
SUPPLY VOLTAGE FOR LCD	V_{EE}- V_{SS}	0	27.0	
INPUT VOLTAGE	V_{IN}	-0.3	V_{DD}+ 0.3	V
OPERATING TEMPERATURE	T_{OP}	0	50	ºC
STORAGE TEMPERATURE	T_{STG}	-20	70	ºC
HUMIDITY (NO CONDENSATION)	-	10	85	%RH

Electrical Characteristics (VDD=5.0±0.25V 25ºC)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE	V_{DD}	-	4.75	5.0	5.25	V
	V_{EE}	V_{EE}- V_{SS}	21.3	22.7	23.1	V
POWER SUPPLY CURRENT	I_{DD}	V_{DD}= 5.0V		2.0	4.0	mA
	I_{EE}	V_{EE}= + 22.7V		6.8	13.0	mA
INPUT HIGH VOLTAGE	V_{IH}	-	4.5	-	V_{DD}	V
INPUT LOW VOLTAGE	V_{IL}	-	0.3	-	0.5	V
CCFL OP. VOLTAGE	V_{FL}	I_{FL}= 5mArms	200	350	600	Vrms
CCFL OP. CURRENT	I_{FL}	V_{FL}= 350V	4.0	5.0	6.0	mA
CCFL START VOLTAGE	V_{FLS}	-	600	-	-	Vrms
CCFL FREQUENCY	f_{FL}	-	-	35	-	kHz
FRAME FREQUENCY	f_{FP}	-	65	72	80	Hz
DRIVE METHOD	1/240 DUTY					

Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
DATA CONNECTOR			
1	FP	H	First Line Marker
2	LP	H/L	Data Latch
3	SCP	H/L	Shift clock
4	DISPOFF	H/L	H= On, L= Off
5	V_{DD}	5V	Power supply for logic
6	V_{SS}	0V	Ground
7	V_{EE}	-	Operating voltage for LC
8	UD0	H/L	Upper screen data input
9	UD1	H/L	Upper screen data input
10	UD2	H/L	Upper screen data input
11	UD3	H/L	Upper screen data input
12	LD0	H/L	Lower screen data input
13	LD1	H/L	Lower screen data input
14	LD2	H/L	Lower screen data input
15	LD3	H/L	Lower screen data input
CCFL CONNECTOR			
1	V_{FL}	-	Power supply for CCFL
2	NC	-	No Connection
3	NC	-	No Connection
4	V_{FLG}	-	Ground