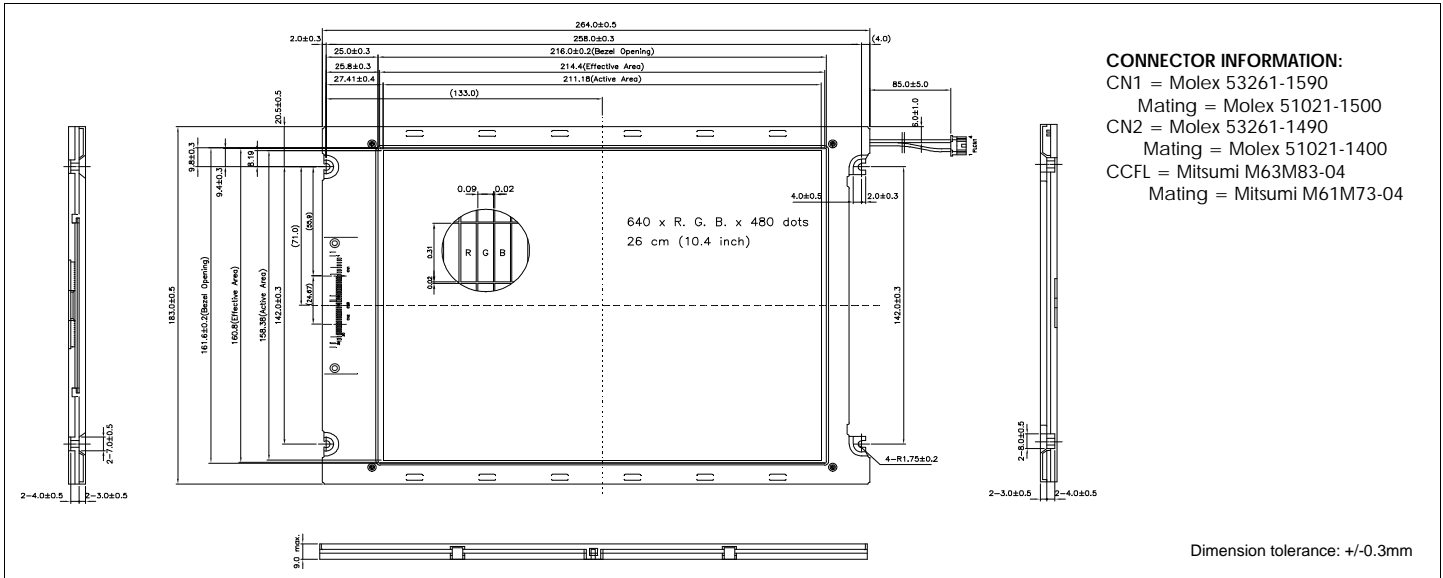


HDM6448C

Dimensional Drawing

640 X 480 10.4" VGA Color



CONNECTOR INFORMATION:
 CN1 = Molex 53261-1590
 Mating = Molex 51021-1500
 CN2 = Molex 53261-1490
 Mating = Molex 51021-1400
 CCFL = Mitsumi M63M83-04
 Mating = Mitsumi M61M73-04

Dimension tolerance: +/-0.3mm

Features

Backlight.....CCFL
 Options.....Color DSTN
 Built-in Controller.....None

Physical Data

Module Size.....264.0W x 183.0H x 12.0T mm
 Viewing Area Size.....216.0W x 161.5H mm
 Dot Pitch.....0.33W x 0.33H mm
 Dot Size.....0.31W x 0.31H mm
 Weight.....490g

Electrical Characteristics (VDD=3.0 or 5.0±0.25V, Ta=25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE	V _{DD}	Ta=25°C	2.7	3.0	3.3	V
	V _{EE}		4.5	5.0	5.5	V
POWER SUPPLY CURRENT	I _{DD}	V _{DD} =5.0V	-	33.0	40.0	mA
	I _{EE}	V _{EE} =23.0V	-	12.0	18.0	mA
INPUT HIGH VOLTAGE	V _{IH}	-	8V _{DD}	-	V _{DD}	V
INPUT LOW VOLTAGE	V _{IL}	-	0	-	.2V _{DD}	V
CCFL OP. VOLTAGE	V _{FL}	I _{FL} =5mA _{rms}		640		V _{rms}
CCFL OP. CURRENT	I _{FL}	V _{FL} =640V _{rms}	3.0	5.0	7.0	mA _{rms}
CCFL START VOLTAGE	V _{FLS}	Ta=0°C	-	750	1500	V _{rms}
BRIGHTNESS		I _{FL} = 5.0mA	50	70		NIT
DRIVE METHOD			1/240 DUTY			

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	25.0	V
CCFL OPERATING VOLTAGE	V _{FL}	-	1500	V _{rms}
CCFL OPERATING CURRENT	I _{FL}	-	10	mA _{rms}
OPERATING TEMPERATURE	T _{OP}	0	50	°C
STORAGE TEMPERATURE	T _{STG}	-20	70	°C
HUMIDITY (NO CONDENSATION)	-	10	85	%RH

Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	FP	H	First Line Marker
2	N/C	-	No connection
3	DISP	H/L	H=On, L=Off
4	LP	H/L	Data latch signal
5	V _{SS}	0V	Ground
6	SCP	H/L	Shift clock
7	V _{SS}	0V	Ground
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	UD4	H/L	Upper screen data input
13	UD5	H/L	Upper screen data input
14	UD6	H/L	Upper screen data input
15	UD7	H/L	Upper screen data input

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	LDO	H/L	Lower screen data input
2	LD1	H/L	Lower screen data input
3	LD2	H/L	Lower screen data input
4	LD3	H/L	Lower screen data input
5	LD4	H/L	Lower screen data input
6	LD5	H/L	Lower screen data input
7	LD6	H/L	Lower screen data input
8	LD7	H/L	Lower screen data input
9	V _{DD}	+5V	Power supply for logic
10	V _{SS}	0V	Ground
11	V _{SS}	0V	Ground
12	V _{EE}		Contrast control
13	V _{EE}		Contrast control
14	V _{EE}		Contrast control

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{FLG}	-	Ground
2	NC	-	No Connection
3	NC	-	No Connection
4	V _{FL}	-	Power supply for CCFL