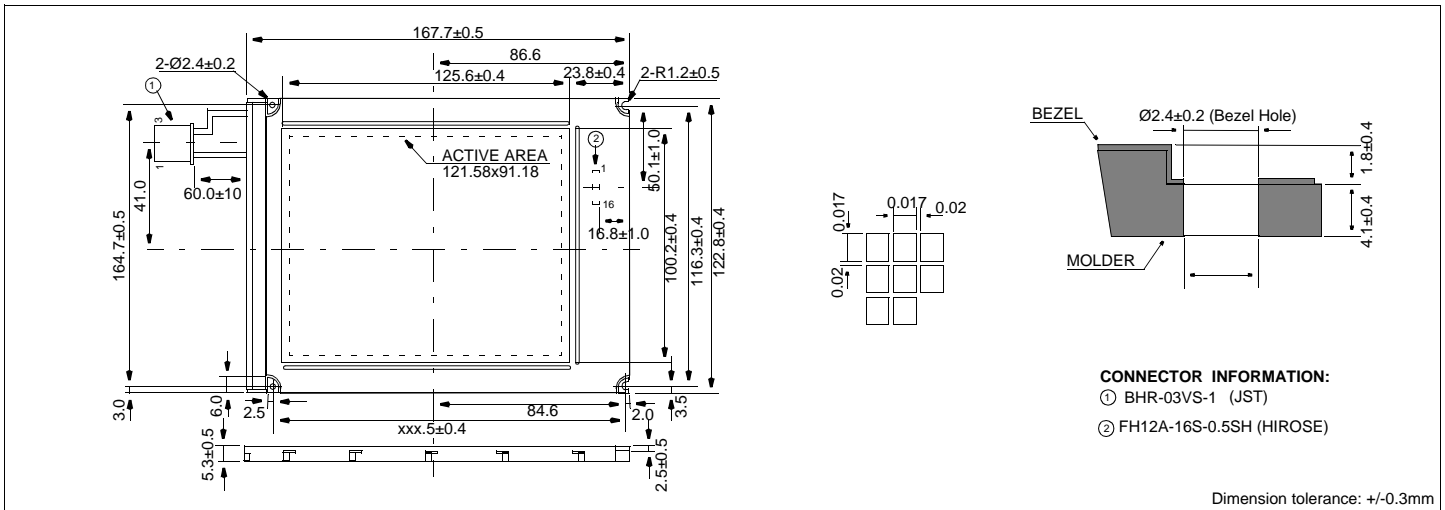


HDM6448-6

Dimensional Drawing

640 X 480 Dots Graphic Small Size CCFL Backlight



Features

Backlight.....CCFL
 Options.....Black & White FSTN
 Bottom Viewing
 Built-in Controller.....None

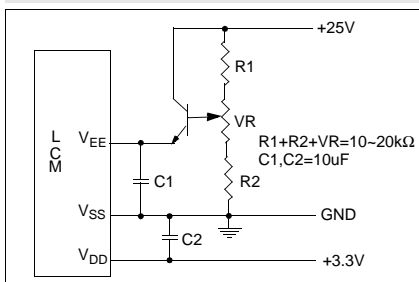
Physical Data

Module Size.....167.7W x 122.8H x 5.3 mm
 Viewing Area Size.....125.6W x 95.2H mm
 Dot Pitch.....0.19W x 0.19H mm
 Dot Size.....0.17W x 0.17H mm
 Weight.....150g

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	0	6.0	V
SUPPLY VOLTAGE FOR LCD	$V_{EE}-V_{SS}$	0	30.0	V
INPUT VOLTAGE	V_{IN}	0	V_{DD}	V

Power Supply



Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION	
DATA CONNECTOR				
1	FLM	H	First Line Marker	
2	CL1	H	Latch pulse	
3	CL2	H	Data shift clock	
4	DISPOFF	H/L	H=On, L=Off	
5	V_{DD}	3.3V	Power supply for logic	
6	V_{SS}	0V	Ground	
7	V_{EE}	-	Operating voltage for LC	
8	UD0	H/L	Upper data bus	
9	UD1	H/L		
10	UD2	H/L		
11	UD3	H/L	Lower data bus	
12	V_{SS}	0V		Ground
13	LD1	H/L		
14	LD2	H/L		
15	LD3	H/L		
16	LD4	H/L		
CCFL CONNECTOR				
1	V_{CFL}	-	CCFL Ground	
2	NC	-	No Connection	
3	V_{CFL}	-	Power supply for CCFL	

Electrical Characteristics (VDD=3.3±0.3V 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT HIGH VOLTAGE	V_{IH}	-	0.8 V_{DD}	-	V_{DD}	V
INPUT LOW VOLTAGE	V_{IL}	-	0	-	0.2 V_{DD}	V
SUPPLY VOLTAGE	V_{DD}	-	3.0	3.3	5.5	V
	$V_{EE}-V_{SS}$	25°C	20.1	20.5	20.9	V
LOGIC CURRENT	I_{DD}	$V_{DD}=5V$	-	0.7	3.0	mA
LCD CURRENT	I_{EE}	$V_{DD}=5V$	-	6.7	15.0	mA
DRIVE METHOD	1/240 DUTY					