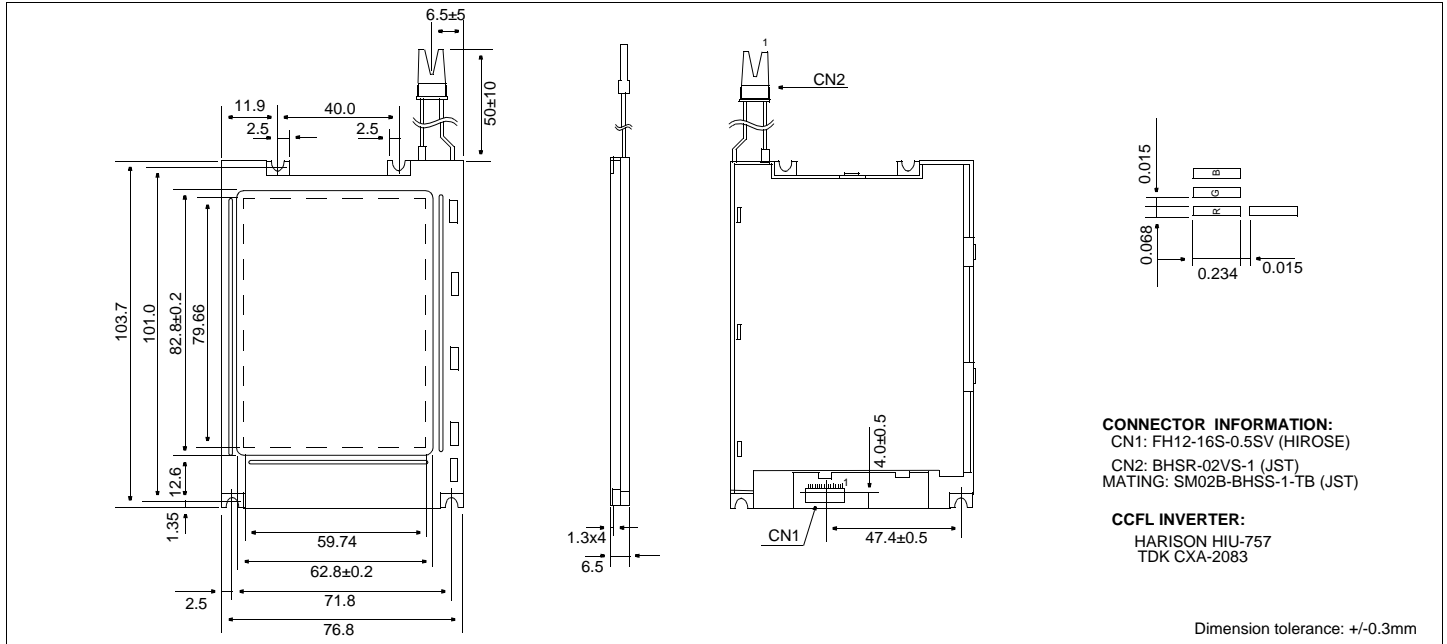


# HDM3224C-S

## Dimensional Drawing

320 X 240 Dots Color Graphic Small Size w/CCFL Backlight



### Features

- Backlight.....CCFL
- Options.....Color RGB
- Normal/Extended Temperature
- Bottom Viewing
- Built-in Controller.....None

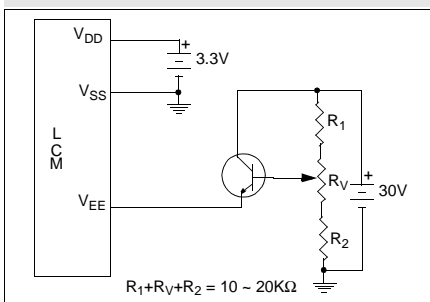
### Physical Data

- Module Size.....76.8W x 103.7H x 6.5T mm
- Viewing Area Size.....62.8W x 82.8H mm
- Dot Pitch.....0.249W x 0.083H mm
- Dot Size.....0.234W x 0.068H mm
- Weight.....74g

### Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	$V_{DD}-V_{SS}$	-0.3	7.0	V
SUPPLY VOLTAGE FOR LCD	$V_{EE}$	0	42.0	V
INPUT VOLTAGE	$V_{IN}$	-0.3	7.0	V
OPERATING TEMPERATURE	$T_{OP}$	0	50	°C
STORAGE TEMPERATURE	$T_{STG}$	-20	60	°C

### Power Supply



### Electrical Characteristics (VDD=3.3±0.25V 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	3.6	V
	$V_L$	$V_{DD} = 5.0V$	23.7	24.0	24.3	V
DRIVE METHOD	1/240 DUTY					

### Pin Connections

PIN NO.	SYMBOL	LEVEL	FUNCTION
<b>DATA CONNECTOR</b>			
1	D7	H/L	Data Bus
2	D6	H/L	
3	D5	H/L	
4	D4	H/L	
5	D3	H/L	
6	D2	H/L	
7	D1	H/L	
8	D0	H/L	
9	$V_{SS}$	0V	Ground
10	$V_{DD}$	3.3V	Power supply for logic
11	DISPOFF	H/L	H=On, L=Off
12	CP	H/L	Data shift
13	LOAD	H/L	Data Latch
14	FRAME	H	First Line Marker
15	$V_{SS}$	0V	Ground
16	$V_{EE}$	-	Operating voltage for LC
<b>CCFL CONNECTOR</b>			
1	$V_{CFL}$	-	Power supply for CCFL
2	GND	-	Ground