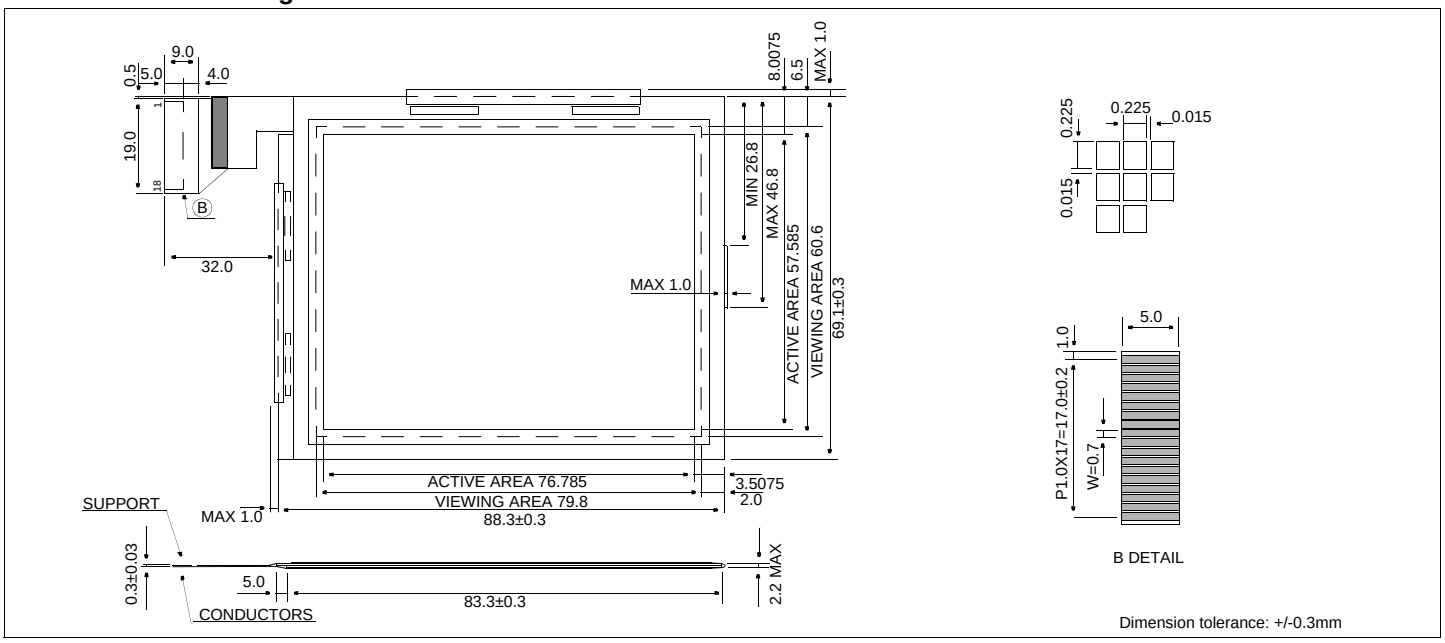
HDG320240 Chip On Glass technology

320 X 240 Dots Graphics

Dimensional Drawing



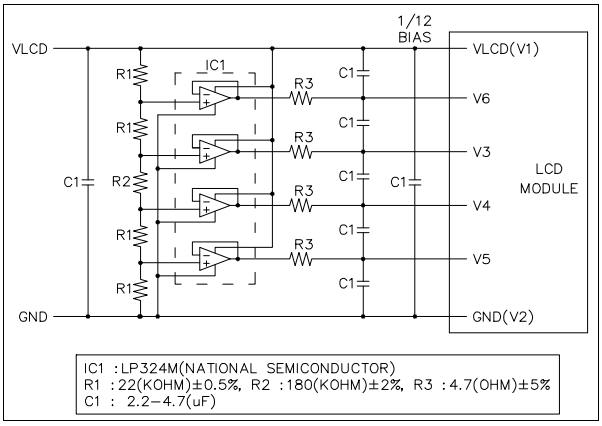
Features

Backlight.....NONE
Options.....Gray STN / Yellow STN / FSTN
Normal/Extended Temperature
Bottom / Top Viewing
Built-in Controller.....None

Physical Data

Module Size.....88.3W x 69.1H x 2.2T mm
Viewing Area Size.....79.8W x 60.6H mm
Dot Pitch.....0.24W x 0.24H mm
Dot Size.....0.225W x 0.225H mm
Weight.....24.5g

Power Supply



Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V_{DD}-V_{SS}	-0.3	7.0	V
SUPPLY VOLTAGE FOR LCD	V_L-V_{SS}	-0.3	36.0	V
INPUT VOLTAGE	V_{IN}	-	7.0	V
OPERATING TEMPERATURE	T_{OP}	-20	70	°C
STORAGE TEMPERATURE	T_{STG}	-30	80	°C

Electrical Characteristics (VDD=3.0±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 VDD	V
OUTPUT HIGH VOLTAGE	V_{OH}	I_{OH}=0.4mA	V_{DD}-0.4	-	-	V
OUTPUT LOW VOLTAGE	V_{OL}	I_{OL}=0.4mA	-	-	0.4	V
SUPPLY VOLTAGE	V_{DD}	-	2.75	3.0	3.25	V
	V_L	-	15.2	15.4	15.6	V
POWER SUPPLY CURRENT	I_{DD}	V_{DD}=3.0V	-	0.1	0.3	mA
	I_L	V_{EE}=21.5V	-	0.55	1.0	mA
FRAME FREQUENCY	f_{FP}	-	65	72	80	Hz
DRIVE METHOD	1/240 DUTY					

Pin Connections

PIN NO.	SYMBOL	FUNCTION	
1	V_L	-	Operating voltage for LC
2	V6	-	Bias voltage
3	V3	-	
4	V4	-	
5	V5	-	
6	V_{SS}	-	Ground
7	V_{SS}	-	Ground
8	V_{DD}	+5v	Logic Power Supply
9	FLM	H/L	Frame Pulse
10	CL2	H/HÆL	Data Shift
11	M	H/L	Liquid Crystal AC drive signal
12	CL1	H/HÆL	Data latch signal
13	INHX	H/L	1=Display ON, 0=Display OFF
14	V_{SS}	-	Ground
15	DB3	H/L	Data bus
16	DB2	H/L	
17	DB1	H/L	
18	DB0	H/L	