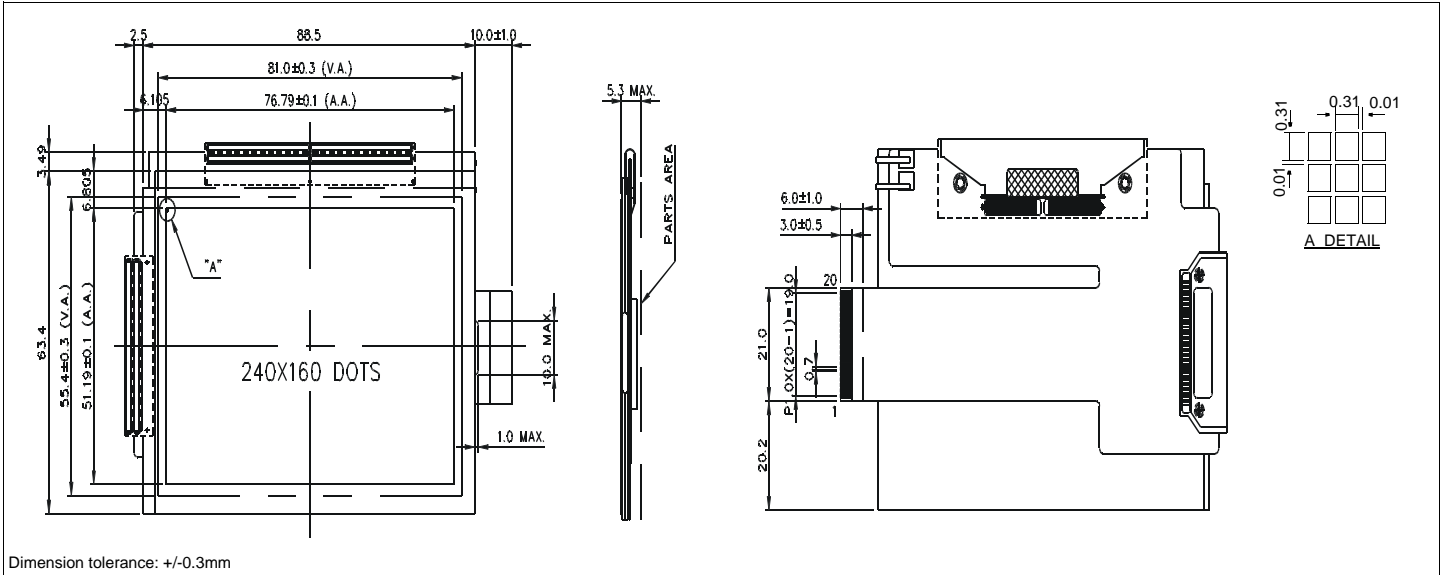


HDM 240GS16-2

3.6" 240 X 160 Dots Graphic

Dimensional Drawing



Features

- Backlight.....EL
- Options.....positive STN or FSTN (B/W)
- Anti-glare Polarizer, Extended Temperature
- Bottom/Top Viewing
- Analog Touch Panel
- Built-in Controller.....None

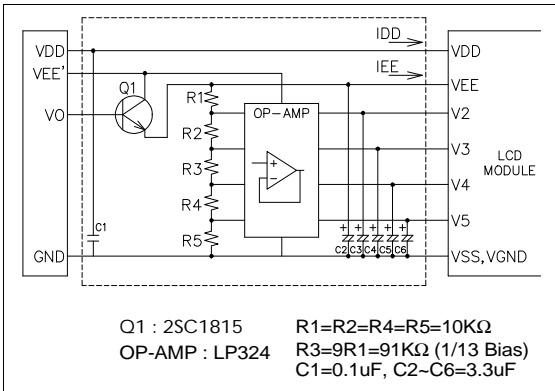
Physical Data

- Module Size.....101W x 67H x 5.3T mm
- Viewing Area Size.....81W x 55.4H mm
- Dot Pitch.....0.32W x 0.32H mm
- Dot Size.....0.31W x 0.31H mm
- Weight.....30g

Electrical Characteristics (VDD=3.3±10% 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
OPERATING VOLTAGE	V _{DD}	-	2.97	3.3	3.63	V
POWER SUPPLY FOR LCD	V _{EE} -V _{SS}	-	18.9	19.2	19.5	V
INPUT HIGH VOLTAGE	V _{IH}	-	.8V _{DD}		V _{DD}	V
INPUT LOW VOLTAGE	V _{IL}	-	0		.2V _{DD}	V
POWER SUPPLY CURRENT	I _{DD}	-	-	0.09	0.5	mA
	I _{EE}	-	-	1.8	3	mA
DRIVE METHOD	1/160 Duty					

Power Supply



Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE	V _{DD} -V _{SS}	-0.3	6.5	V
POWER SUPPLY FOR LCD	V _{EE} -V _{SS}	0	27.0	V
INPUT VOLTAGE	V _{IN}	0	6.5	V
OPERATING TEMPERATURE	T _{OP}	-20	70	°C
STORAGE TEMPERATURE	T _{STG}	-30	80	°C

Pin Connections

PIN NO.	SYMBOL	FUNCTION
1	V ₅	Bias Voltage for non-select (Common Driver)
2	V ₂	Bias Voltage for non-select (Common Driver)
3	V _{EE}	Power supply voltage for LCD
4	V _{DD}	3.3V Power supply for logic
5	FRAME	H/L Frame signal (Data signal of the shift register of the common driver)
6	V _{GND}	GND, Power supply voltage for LCD
7	LOAD	1) Display data latch 2) Shift clock for common driver
8	V _{SS}	0V Ground
9	DF	switch signal to convert LCD drive waveform into AC
10	DISPOFF	L Display off
11	CP	H/H→L clock pulse for segment shift register
12	V ₄	Bias Voltage for non-select (Segment Driver)
13	V ₃	Bias Voltage for non-select (Segment Driver)
14	DB3	H/L
15	DB2	H/L
16	DB1	H/L
17	DB0	H/L
18	N/C	- No connection
19	EL1	- Power supply for EL backlight
20	EL2	- Power supply for EL backlight