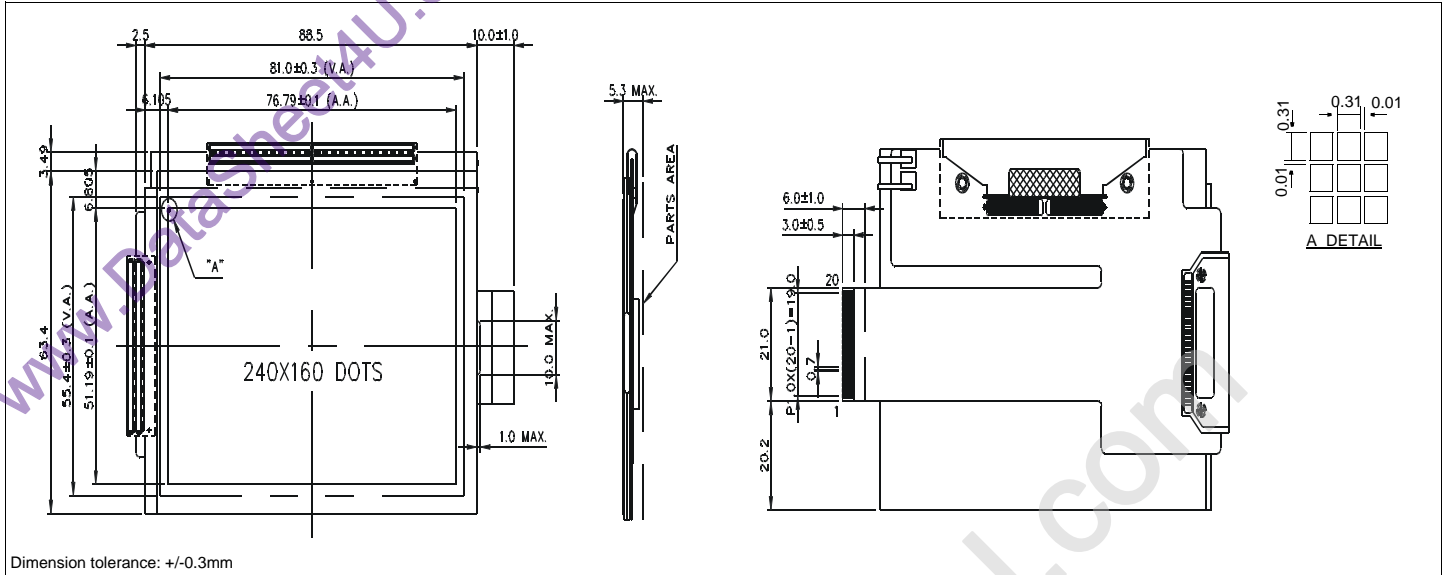


# HDM 240GS16-2

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

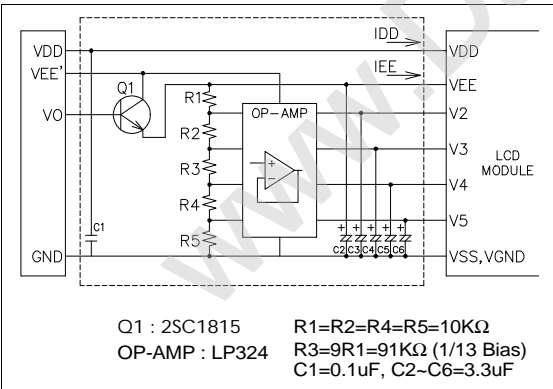
### Physical Data

- 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 <sub>DD</sub>	-	2.97	3.3	3.63	V
POWER SUPPLY FOR LCD	V <sub>EE</sub> -V <sub>SS</sub>	-	18.9	19.2	19.5	V
INPUT HIGH VOLTAGE	V <sub>IH</sub>	-	.8V <sub>DD</sub>		V <sub>DD</sub>	V
INPUT LOW VOLTAGE	V <sub>IL</sub>	-	0		.2V <sub>DD</sub>	V
POWER SUPPLY CURRENT	I <sub>DD</sub>	-	-	0.09	0.5	mA
	I <sub>EE</sub>	-	-	1.8	3	mA
DRIVE METHOD	1/160 Duty					

### Power Supply



### Absolute Maximum Ratings

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

### Pin Connections

PIN NO.	SYMBOL	FUNCTION
1	V <sub>5</sub>	Bias Voltage for non-select (Common Driver)
2	V <sub>2</sub>	Bias Voltage for non-select (Common Driver)
3	V <sub>EE</sub>	Power supply voltage for LCD
4	V <sub>DD</sub>	3.3V Power supply for logic
5	FRAME	H/L Frame signal (Data signal of the shift register of the common driver)
6	V <sub>GND</sub>	GND, Power supply voltage for LCD
7	LOAD	H/L 1) Display data latch 2) Shift clock for common driver
8	V <sub>SS</sub>	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 <sub>4</sub>	Bias Voltage for non-select (Segment Driver)
13	V <sub>3</sub>	Bias Voltage for non-select (Segment Driver)
14	DB3	H/L Data bus
15	DB2	H/L Data bus
16	DB1	H/L Data bus
17	DB0	H/L Data bus
18	N/C	No connection
19	EL1	Power supply for EL backlight
20	EL2	Power supply for EL backlight