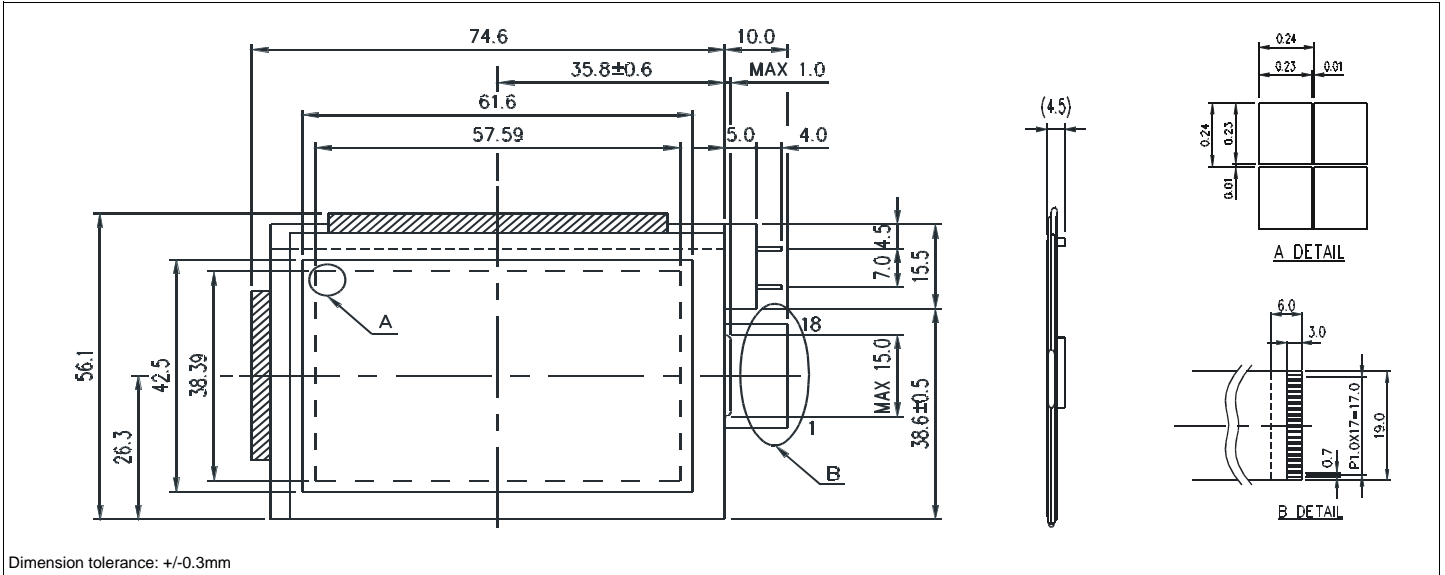


HDM 240GS16-1

2.8" 240 X 160 Dots Graphic

Dimensional Drawing



Features

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

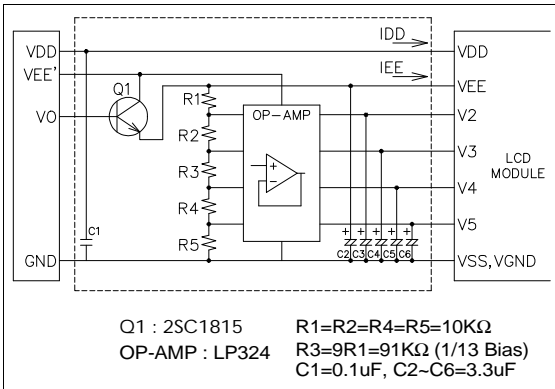
Physical Data

Module Size.....74.6W x 56.1H x 4.5T mm
 Viewing Area Size.....61.6W x 42.5H mm
 Dot Pitch.....0.24W x 0.24H mm
 Dot Size.....0.23W x 0.23H mm
 Weight.....15g or 17g

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}	Normal	20.1	20.4	20.7	V
		Extended	20.5	20.8	21.1	V
POWER SUPPLY CURRENT (Normal Temp. LCM)	I _{DD}	-	-	0.55	0.83	mA
	I _{EE}	-	-	0.8	1.2	mA
POWER SUPPLY CURRENT (Extended Temp. LCM)	I _{DD}	-	-	0.58	0.88	mA
	I _{EE}	-	-	0.9	1.4	mA
EL Power Supply Current	I _{EL}	65 V _{rms} 250Hz	2.97	3.3	3.63	V
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}	0	50	°C
STORAGE TEMPERATURE	T _{STG}	-20	70	°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}	-
4	V _{DD}	3.3V
5	FRAME	H/L
6	V _{GND}	-
7	LOAD	H/L
8	V _{SS}	0V
9	DF	
10	DISPOFF	L
11	CP	H/H→L
12	V ₄	
13	V ₃	
14	DB3	H/L
15	DB2	H/L
16	DB1	H/L
17	DB0	H/L
18	N/C	-