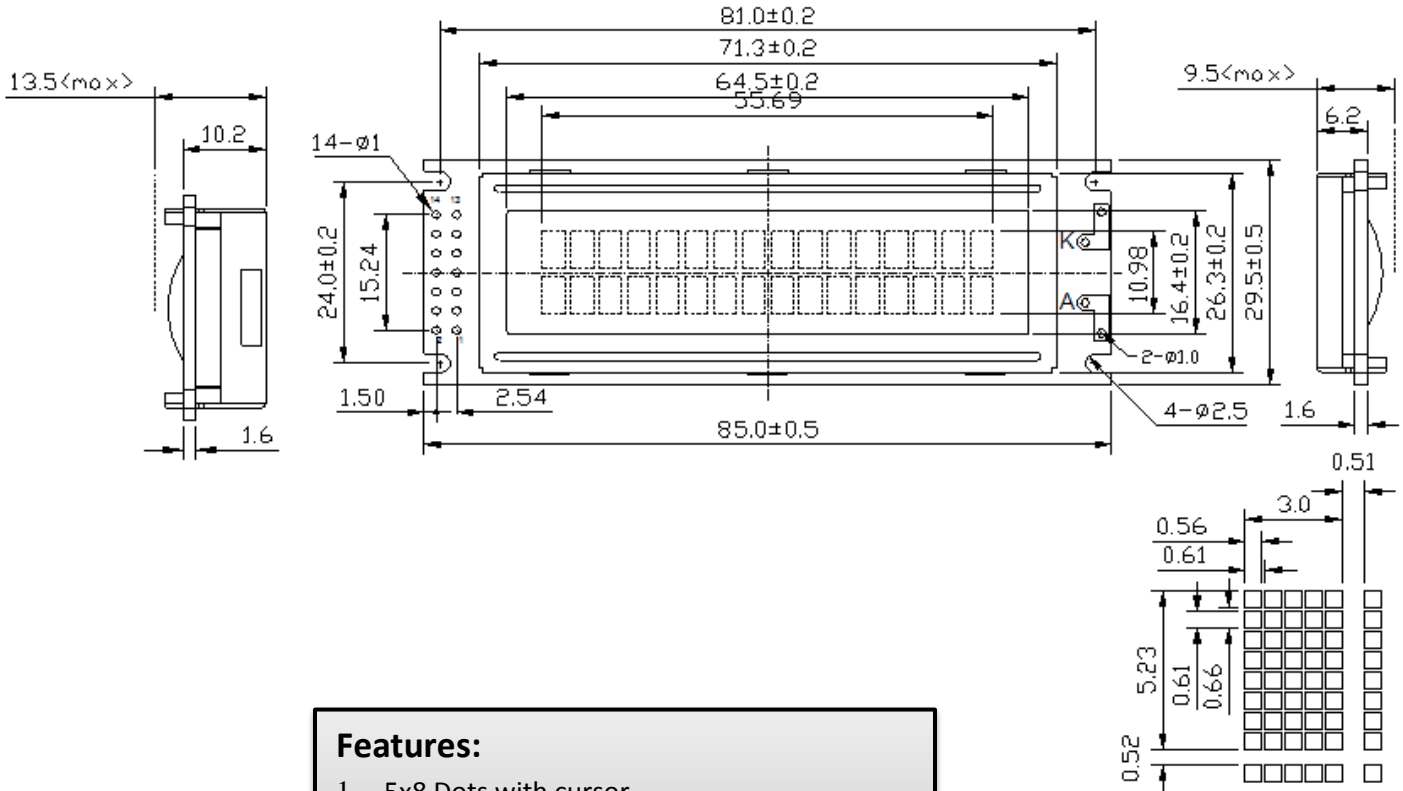




Basic Character LCD Drawing

Part Number: FDS16x2(81x24)LBC



Features:

1. 5x8 Dots with cursor
2. Built-in controller (SPLC780D or Equivalent)
3. +5V power supply
4. 4-bit or 8-bit MPU interfaces
5. ROHS compliant

Mechanical Data

ITEM	STANDARD	UNIT
MODULE DIMENSION	85.0 X 29.5	mm
VIEWING AREA	64.5 X 16.4	mm
DOT SIZE	0.56 X 0.61	mm
CHARACTER SIZE	3.00 X 5.23	mm



Interface Pin Connections

NO	SYMBOL	LEVEL	FUNCTION
1	V _{DD}	Power Supply	Power supply for logic for LCM
2	V _{SS}		Signal Ground for LCM
3	V _O		Contrast Adjustment
4	RS	MPU	Register Select signal
5	R/W	MPU	Read/Write Select signal
6	E	MPU	Operation (data read/write) enable signal
7~10	DB ₀ ~DB ₃	MPU	Four Low Order bi-directional three-state data bus lines. Used for data transfer between the MPU and the LCM. These four are not used during 4-bit operation.
11~14	DB ₄ ~DB ₇	MPU	Four High Order bi-directional three-state data bus lines. Used for data transfer between the MPU.

Absolute Maximum Rating

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Voltage	V _{DD} -V _{SS}	0	--	7.0	V
Input Voltage	V _{IN}	V _{SS}	--	V _{DD}	
Operating Temperature Range	V _{OP}	-20	--	+70	°C
Storage Temperature Range	V _{ST}	-30	--	+80	

Electrical Characteristics

ITEM	SYM	CONDITION	MIN	TYP	MAX	UNIT
Supply Voltage for LCD	V _{DD} -V _O	T _a =25°C	--	4.5	--	V
Input Voltage	V _{DD}		4.7	5.0	5.5	V
Supply Current	I _{DD}	T _a =25°C, V _{DD} =5.0V	--	1.5	2.5	mA
Input Leakage Current	I _{LKG}		--	--	1.0	uA
“H” Level Input Voltage	V _{IH}		2.2	--	V _{DD}	V
“L” Level Input Voltage	V _{IL}	Twice Initial Value or Less	0	--	0.6	
“H” Level Output Voltage	V _{OH}	LOH= -0.25mA	2.4	--	--	
“L” Level Output Voltage	V _{OL}	LOH= 1.6mA	--	--	0.4	
Backlight supply voltage	V _F		--	4.2	--	
Backlight supply current	I _{LED}	V _F =4.2V	--	120	--	mA