

ITEM	STANDARD VALUE			UNIT
DOT MATRIX FORMAT	320 × 240 DOTS			--
Controller IC	RA8835A or Equivalent			
MODULE DIMENSION	160.0 (W) X 109.0 (H) X 11.0 (T)			mm
VIEWING DISPLAY AREA	122.0 (W) × 92.0 (H)			mm
ACTIVE DISPLAY AREA	115.17 (W) × 86.37 (H)			mm
DOT SIZE	0.33 (W) × 0.33 (H)			mm
DOT PITCH	0.36 (W) × 0.36 (H)			mm
● EDGE LED BACKLIGHT COLOR	WHITE			
BACKLIGHT INPUT	DC+4.0 (Type)	V	160 (Type)	mA
BACKLIGHT LIFE TIME	20,000 (AVOID LIGHTING CONTINUOUSLY , Ta=25℃)			HR.

[illegible]

NO	SYMBOL	FUNCTION
1	/RES	Reset signal
2	/RD	DATA read
3	/WR	DATA Write
4	/CS	CHIP select
5	A0	Data/Instruction code
6	DB0	Data Bit0
7	DB1	Data Bit1
8	DB2	Data Bit2
9	DB3	Data Bit3
10	DB4	Data Bit4
11	DB5	Data Bit5
12	DB6	Data Bit6
13	DB7	Data Bit7
14	VDD	VDD(+5V)
15	VSS	GND(0V)
16	VEE	Negative voltage Output
17	VO	Contrast Adjust
18	NC	--
19	LED-A	LED Backlight + (DC+5.0V)
20	LED-K	LED Backlight- (DC 0V)

The block diagram illustrates the internal architecture of the LCD module. It features a central **Control IC RA8835A** which manages the display. This IC is connected to an **LCD 320 X 240 Dots** via three 80-bit data buses. The Control IC also interfaces with three **COM IC**s and four **SEG IC**s. A **32K SRAM** is connected to the Control IC for local data storage. The module is powered by a **Power Supply** (VDD, VSS, Vo, VEE) and includes a **Backlight** section with two inputs. A **VR 50K** potentiometer is used to adjust the voltage (Vo) supplied to the LCD. The entire system is connected to a **LCM 320 * 240** (Liquid Crystal Module) which provides the final display output.