Mechanical Data

Item	Standard Value	Unit
Module Dimension	170.0x103.5	mm
Viewing Area	132.0x76.0	mm
Dot Size	0.47x0.47	mm
Dot Pitch	0.5x0.5	mm
Mounting hole	162.0 x 85.0	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	4.75	5.0	5.25	V
Input Voltage	VI	-0.3	---	VDD	V

Note : VSS=0 Volt, VDD=5.0 Volt.

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	L level	$0.7V_{DD}$	---	V_{DD}	V
	VIO	H level	---	---	$0.3V_{DD}$	V
Supply Current	IDD	VDD=5V	---	23	---	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	0°C	19.1	19.5	20.1	V
		25°C	18.1	18.5	19.1	
		50°C	17.1	17.5	18.1	
LED Forward Voltage	VF	25°C	---	---	---	V
LED Forward Current	IF	25°C	---	---	---	mA
CCFL	VF	25°C	---	325	580	Vms
	IF	25°C	---	---	5.0	mA
EL	IEL	Vel=110VAC;400Hz	---	---	5.0	mA

Feature

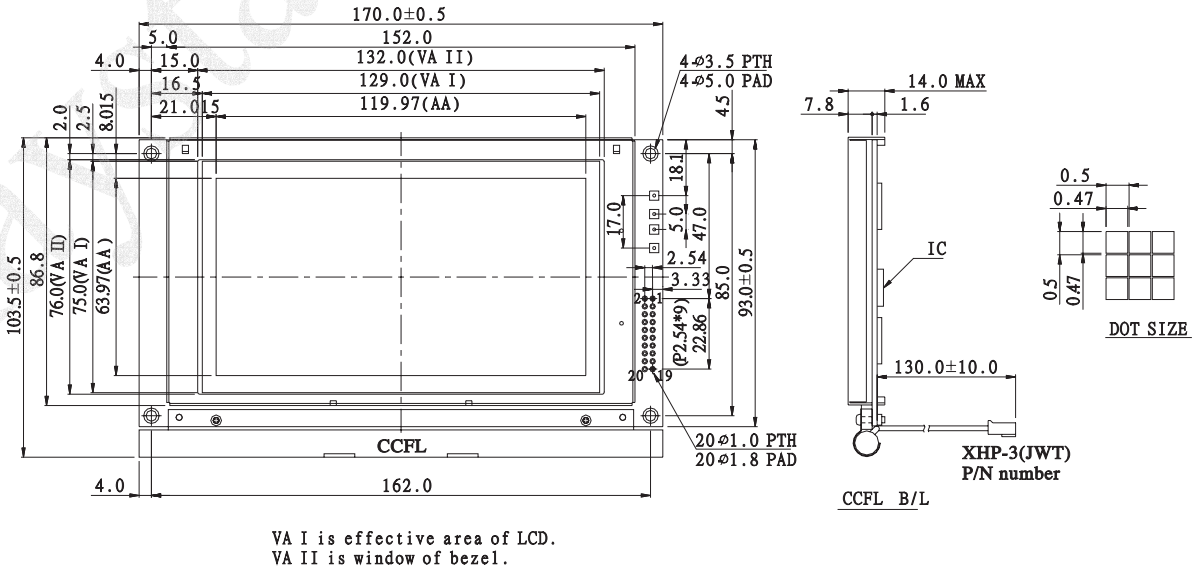
1. Built-in controller TOSHIBA-(T6963C)
2. 1/128duty cycle
3. Built-in N/V (option)

Pin NO	Symbol	Function
1	FGND	Frame GEN(connected to bezel)
2	Vss	GND
3	Vdd	Power supply for logic circuit
4	VO	Contrast Adjustment
5	$\overline{WR}$	Data write
6	$\overline{RD}$	Data read
7	$\overline{CE}$	Chip enable
8	C/D	Code/Data
9	NC/Vee	No connection/Negative Voltage output
10	$\overline{RST}$	Controller reset
11	DB0	Data bus line
12	DB1	Data bus line
13	DB2	Data bus line
14	DB3	Data bus line
15	DB4	Data bus line
16	DB5	Data bus line
17	DB6	Data bus line
18	DB7	Data bus line
19	FS	Font selection FS="H",6x8 character font FS="L",8x8 character font
20	RV	Reverse

Graphic type

RG240128A Graphic 240x128 dots

Dimension drawing



VA I is effective area of LCD.
VA II is window of bezel.

Raystar Optronics Inc.