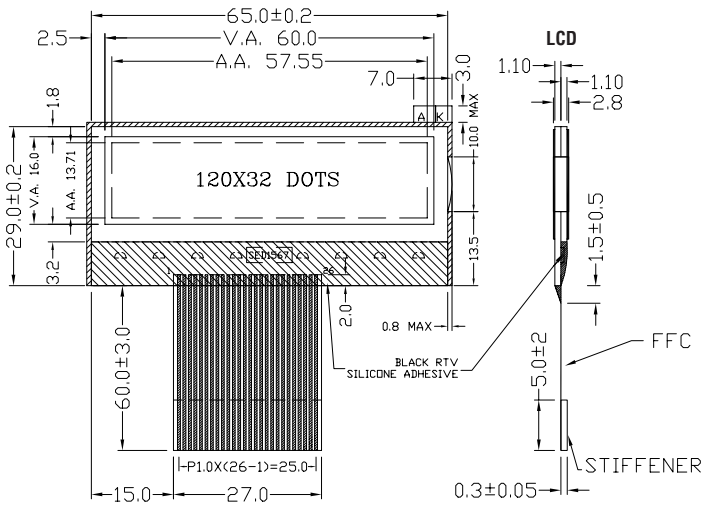
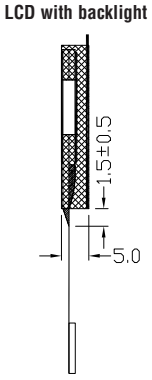
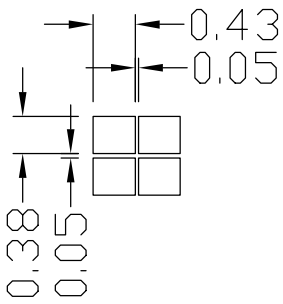
BT 120032AVB-COG

120 x 32 Dots



Dimensions [mm]





Dot Size

DESCRIPTION

The BT 120032AVB is a STN dot matrix LCD module with graphics capability. The module consists of a newly developed STN type LCD with high contrast, wide viewing angle, CMOS LCD controller and a FFC-cable. The control LSI has a built-in display data RAM and parallel interface.

FEATURES

- High contrast and wide viewing angle.
- Low power consumption.
- Controller / Driver Type SED1567.
- Light weight /compact dimensions.
- Internal DC/DC converter for VLCD.
- Backlight optional.
- Mating connector (SMD) T.B.D.

MECHANICAL DATA

Parameter	Width x Height x Depth	Unit
Outline Dimension COG-LCD	65.0 x 29.0 x 2.8	mm
Outline Dimension Backlight	66.6 x 29.8 x 5.0	mm
Effective Viewing Area	60.0 x 16.0	mm
Dot Size	0.43 x 0.38	mm
Dot Pitch	0.48 x 0.43	mm
Dot Matrix	120 x 32	dots
Weight COG-LCD with FFC	11	g
Weight Backlight	6	g

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min	Max	Unit
Supply Voltage (Logic)	V_{DD} (V_{DD}-V_{SS})	-0.3	7.0	V
Supply Voltage (LCD Driver)	V_{EE} (V_{EE}-V_{SS})	0	-18	V
Input Voltage	V_I	VSS-0.3	VDD+0.3	V
Operating Temperature	T_{OP}	0 to 50		°C
Storage Temperature	T_{ST}	-20 to 60		°C

ELECTRICAL CHARACTERISTICS

Condition: Ta = 0 to 50°C

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage(Logic)	V_{DD}	2.7	---	5.5	V
Input Voltage HIGH	V_{INH}	0.8*VDD	---	VDD	V
Input Voltage LOW	V_{INL}	VSS	---	0.2*VDD	V
Supply Current(Logic)	I_{DD}	see specification of SED1567 for details			
Duty an Bias Ratio	---	1/33 Duty -- 1/6 Bias		---	---

LED BACKLIGHT

Condition: Ta = 25°C

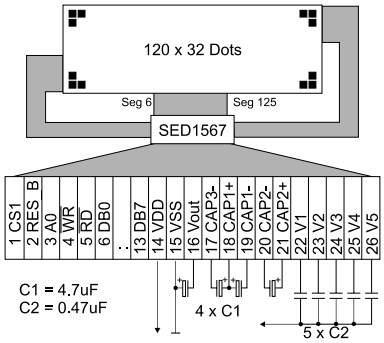
Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V_F	4.0	4.1	4.2	V
Supply Current	I_F		50	100	mA
Lamp Style		---	03	---	---
LED Segments		5 x 2 Chips / 567nm			

PIN TABLE

Pin	Symbol	Signal Description
1	$\overline{CS1}$	Chip select
2	$\overline{RES\ B}$	Reset
3	A0	$\overline{Command}$ / Data - Selection
4	$\overline{WR}$	8080 mode = $\overline{WR}$
5	$\overline{RD}$	8080 mode = $\overline{RD}$
6 to 13	DB0 to DB7	Data bus
14	VDD	Power supply for logic
15	VSS	Ground (0V)
16	Vout	LCD driving voltage
17	CAP3-	Capacitor terminal for DC/DC converter*
18	CAP1+	Capacitor terminal for DC/DC converter*
19	CAP1-	Capacitor terminal for DC/DC converter*
20	CAP2-	Capacitor terminal for DC/DC converter*
21	CAP2+	Capacitor terminal for DC/DC converter*
22	V1	LCD driving voltage
23	V2	LCD driving voltage
24	V3	LCD driving voltage
25	V4	LCD driving voltage
26	V5	LCD driving voltage

* See specification of SED1567 for details.

BLOCK DIAGRAM



Graphic LCD Modules