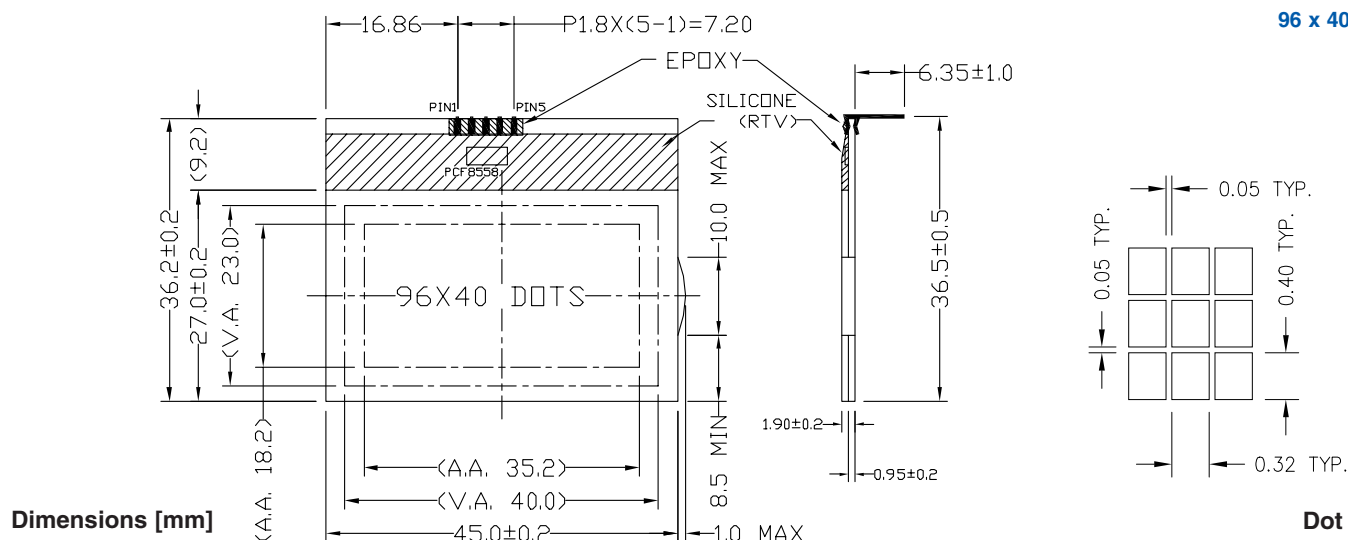




DESCRIPTION

The BT 96040 V 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. The control LSI has a built-in display data RAM and I²C-BUS.

FEATURES

- High contrast and wide viewing angle.
- Low power consumption.
- Controller / Driver Type PCF8558.
- Light weight /compact dimensions.
- I²C-BUS / Device address = 7A/7B hex (write/read)

MECHANICAL DATA

Parameter	Width x Height x Depth	Unit
Outline Dimension COG-LCD	45.0 x 36.2 x 1.9	mm
Effective Viewing Area	40.0 x 23.0	mm
Dot Size	0.32 x 0.40	mm
Dot Pitch	0.37 x 0.45	mm
Dot Matrix	96 x 40	dots
Weight COG-LCD with pins	8	g

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min	Max	Unit
Supply Voltage (Logic)	V _{DD} (V _{DD} -V _{SS})	-0.5	8.0	V
Supply Voltage (LCD Driver)	V _{LCD} (V _{LCD} -V _{SS})	V _{DD} -11	V _{DD}	V
Input Voltage	V _I	V _{SS} -0.3	V _{DD} +0.3	V
Operating Temperature	T _{OP}	0 to 50		°C
Storage Temperature	T _{ST}	-10 to 60		°C

ELECTRICAL CHARACTERISTICS

Condition:	Ta = 25°C				
Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage (Logic)	V _{DD}	2.5	---	6.0	V
LCD-Voltage	V _{DD} -V _{LCD}	---	7.25	---	V
Input Voltage HIGH	V _{INH}	V _{DD} -0.1	---	V _{DD}	V
Input Voltage LOW	V _{INL}	V _{SS}	---	V _{DD} -1.5	V
Supply Current (Logic)	I _{DD}	---	0.12	0.18	mA
Supply Current (V _{LCD})	I _{LCD}	---	0.13	0.20	mA
Duty an Bias Ratio		--- 1/40 Duty -- 1/7 Bias ---			---

LED BACKLIGHT

Condition:	Ta = - °C				
Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V _F	---	---	---	V
Supply Current	I _F	---	---	---	mA
Lamp Style		---	---	---	---
LED Segments		---			---

PIN TABLE

Pin	Symbol	Signal Description
1	SDA	I ² C - DATA Signal
2	VSS	Ground (0V)
3	VLCD	Supply Voltage for LCD (Contrast adjustment)
4	VDD	Power supply for logic
5	SCL	I ² C - Clock Signal

BLOCK DIAGRAM

