

# 2420 24 chars x 2 lines TN/STN

# Reflective/EL/LED Backlight

## ABSOLUTELY MAXIMUM RATINGS

Item	Symbol	Standard Value			Unit
		Min	Typ.	Max.	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	0	--	7.0	V
Supply Voltage for LCD Drive	$V_{DD}-V_{EE}$	1.5	--	13.5	V
Input Voltage	$V_I$	$V_{SS}$	--	$V_{DD}$	V
Operation Temperature	$T_{op}$	0	--	50	°C
Storage Temperature	$T_{stg}$	-20	--	70	°C

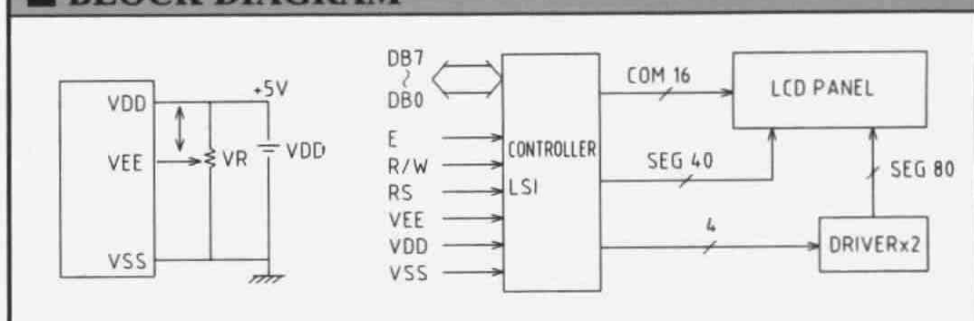
## ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Standard Value			Unit
			Min.	Typ.	Max.	
Input "High" Voltage	$V_{IH}$	--	$0.7 \times V_{DD}$	--	$V_{DD}$	V
Input "Low" Voltage	$V_{IL}$	--	$V_{SS}$	--	$0.3 \times V_{DD}$	V
Output "High" Voltage	$V_{OH}$	$I_{OH}=0.2mA$	2.2	--	--	V
Output "Low" Voltage	$V_{OL}$	$I_{OL}=1.2mA$	--	--	0.4	V
Supply Current	$I_{DD}$	$V_{DD}=5.0V$	--	2.0	4.0	mA

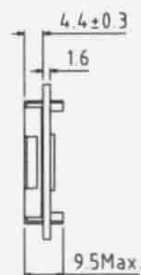
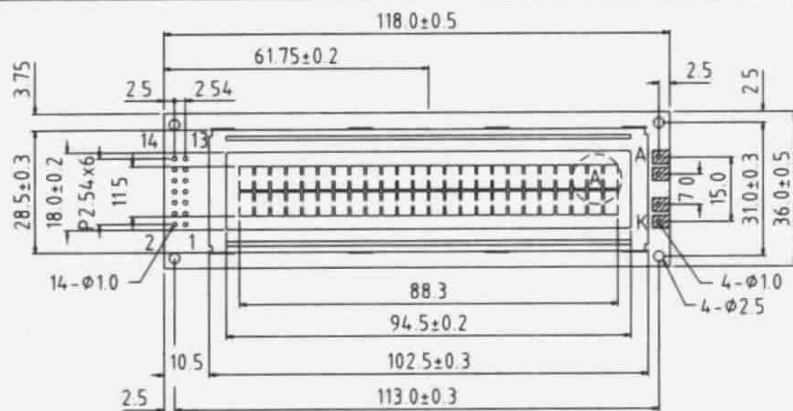
## PIN FUNCTIONS

No.	Symbol	Function	No.	Symbol	Function
1	$V_{SS}$	GND, 0V	8	DB1	Data Bus
2	$V_{DD}$	+5V	9	DB2	--
3	$V_{EE}$	for LCD Drive	10	DB3	--
4	RS	Function Select	11	DB4	--
5	R/W	Read/Write	12	DB5	--
6	E	Enable Signal	13	DB6	--
7	DB0	Data Bus Line	14	DB7	--

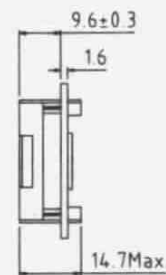
## BLOCK DIAGRAM



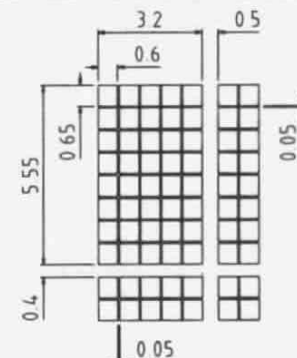
## DIMENSION OUTLINE



REF, EL, B/L



LED/B/L



A BLOCK