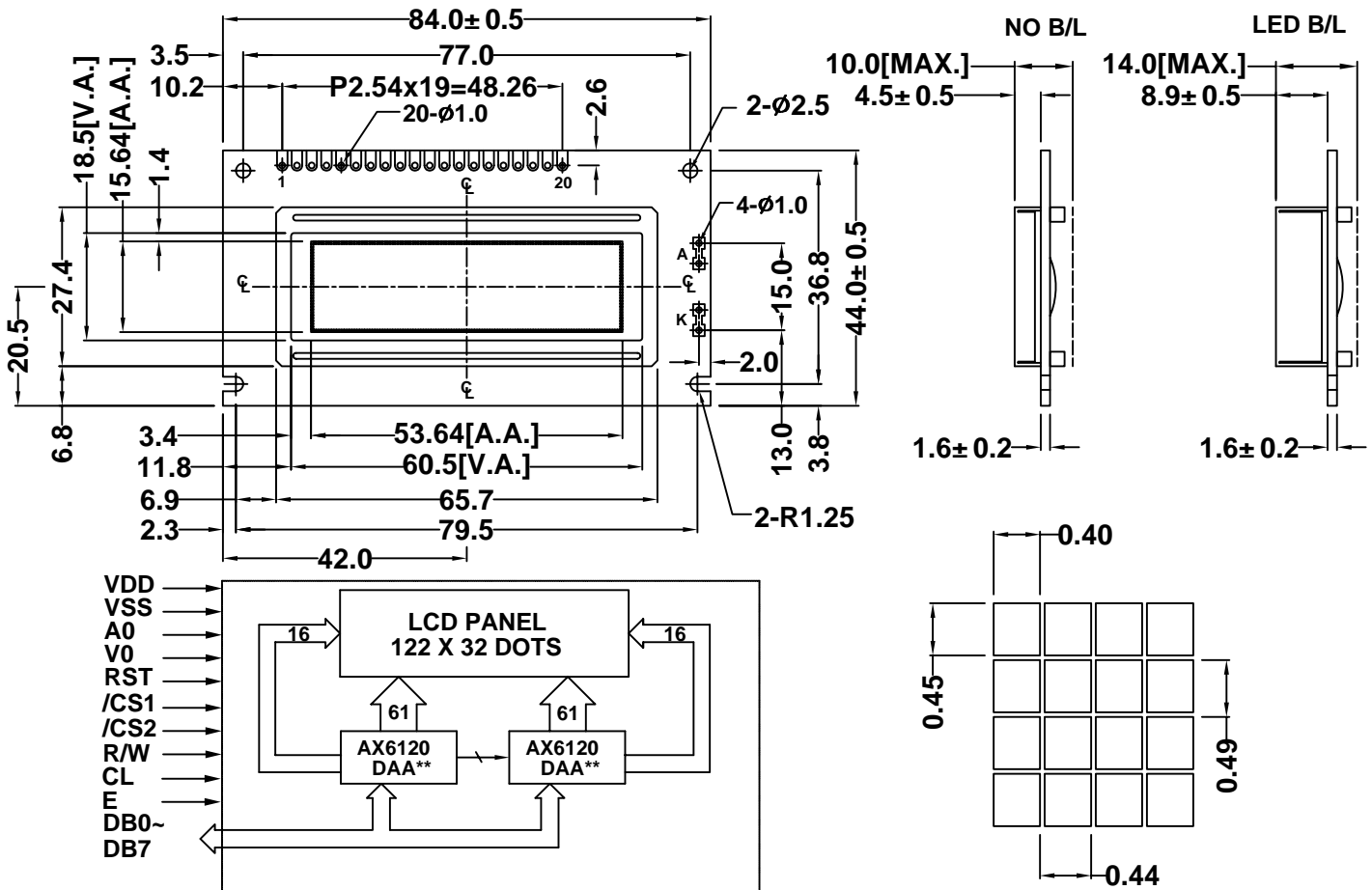


BHG12232E

CONTOUR DRAWING & BLOCK DIAGRAM



** OR EQUIVALENT

MECHANICAL SPECIFICATION		
ITEM	SPECIFICATION	UNIT
Module Size	84.0X44.0X10.0/14.0	mm
Viewing Area	60.5X18.5	mm
Number of dots	122X32	dots
Dot Pitch	0.44X0.49	mm
Dot Size	0.40X0.45	mm

ABSOLUTE MAXIMUM RATINGS				
PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Supply Voltage	Vdd	-0.3	7.0	V
LCD Supply Voltage	Vlcd(Vdd-V0)	0	12	V
Input Voltage	Vin	-0.3	Vdd+0.3	V
Operating Temperature*	Top	0/-20	50/70	° C
Storage Temperature*	Tstr	-10/-30	60/80	° C

PIN CONNECTIONS		
PIN	SYMBOL	DESCRIPTION
1	VSS	Ground
2	VDD	Supply voltage for LCD(+)
3	V0	Supply voltage for LCD(-)
4	A0	Register Select
5	/CS1	Chip Select 1
6	/CS2	Chip Select 2
7	CL	Clock
8	E	Enable
9	R/W	Read/Write
10-17	DB0-DB7	DATA Bus
18	RST	Reset signal
19	A	Anode for backlight
20	K	Cathode for backlight

ELECTRICAL CHARACTERISTICS(Ta=25° C)						
ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage(logic)	Vdd	-	4.5	5.0	5.5	V
Supply Current(logic)	Idd	Vdd=5.0	-	1.0	3.0	mA
Driving Voltage(LCD)	Vlcd	-	-	6.5	-	V
Driving Current(LCD)	Ilcd	-	-	0.3	0.6	mA

BACKLIGHT CHARACTERISTICS (Ta=25° C)						
PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage	Vf	If=190mA	3.8	4.2	4.3	V
LED Forward Current	If	-	-	190	-	mA
LED Dissipation	Pd	-	-	798	-	mW

*T1/T2: T1for standard temperature LCM, T2 for wide temperature LCM