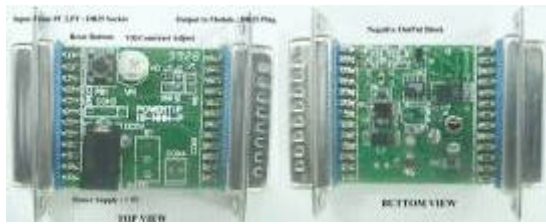


IB1-NNN-P Series

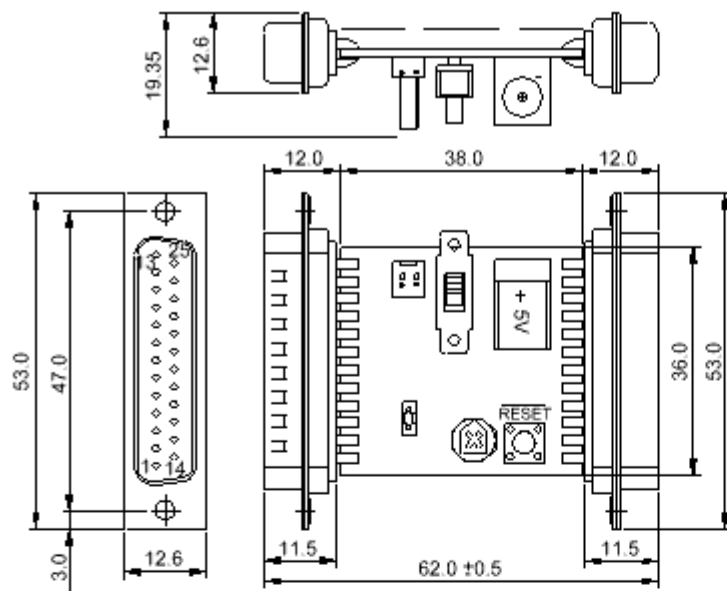


Outline Dimension & Block Diagram

- Character LCD Modules
- Graphic LCD Modules
- [Inquiry For Customer Design LCD Modules](#)

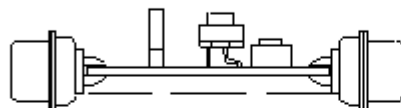
MECHANICAL SPECIFICATION(unit: mm)						
Outline dimension / W x L x H mm			62.0 x 53.0 x 19.35			
ABSOLUTE MAXIMUM RATING						
Item	Symbol	Conditions	Min.	Max.	Unit	
Power Supply Voltage	Vdd	-	3.0	12.0	V	
LCD Driver Supply Voltage	Vee	-	-23	-25	V	
Input Voltage	Vin	-	-0.3	Vdd+0.3	V	
Operating Temperature	Topr	-	-20	+70	°C	
Storage Temperature	Tstg	-	-30	+80	°C	
Humidity * 1	HD	-	-	90	%RH	
ELECTRICAL CHARACTERISTICS (Vdd=+5V±10%, Vss=0V, Ta=25°C)						
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Logic Supply Voltage	Vdd	-	4.5	5.0	5.5	V
Vee Output Voltage	Vee	-	-	-25	-	V
"H" Input Voltage	VIH	-	0.8 * Vdd	-	Vdd	V
"L" Input Voltage	VIL	-	0	-	0.2 * Vdd	V
"H" Output Voltage	VOH	-	Vdd-0.3	-	Vdd	V
"L" Output Voltage	VOL	-	0	-	0.3 * Vdd	V
Standby Current	Idd	Vdd=5V	-	160	-	uA
Operating Current	Iout	Vdd=5V	-	20	-	mA

APPLICABLE SERIES			
DOT PIXELS	MODULE	CONTROLLER	PIN OUT STYLE
All Character type	PCxxxx-x	-	DIP/SIP
80 x 80	PG8080-A	LC79081	SIP 16
128 x 64	PG12864-F	TC6963C	SIP 18
128 x 128	PG128128-A	TC6963C	DIP 20
160 x 128	PG160128-A	TC6963C	DIP 20
240 x 64	PG24064-A	LC7981	DIP 20
240 x 64	PG24064-B	LC7981	DIP 20
240 x 64	PG24064-D	TC6963C	SIP 20
240 x 64	PG24064-E	TC6963C	DIP 20
240 x 64	PG24064-F	TC6963C	DIP 20
240 x 128	PG240128-A	TC6963C	SIP 20
320 x 240	PG320240-D	SED 1330	DIP 20



PIN NO	SIGNAL	PIN NO	SIGNAL
1	STROBE	14	AUTO FEED
2	DB0	15	ERROR
3	DB1	16	INIT
4	DB2	17	SLCT IN
5	DB3	18	GND
6	DB4	19	GND
7	DB5	20	GND
8	DB6	21	GND
9	DB7	22	GND
10	ACK	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCT		

DB25-PLUG
(From PC LPT)



DB25-SOCKET
(To Module)

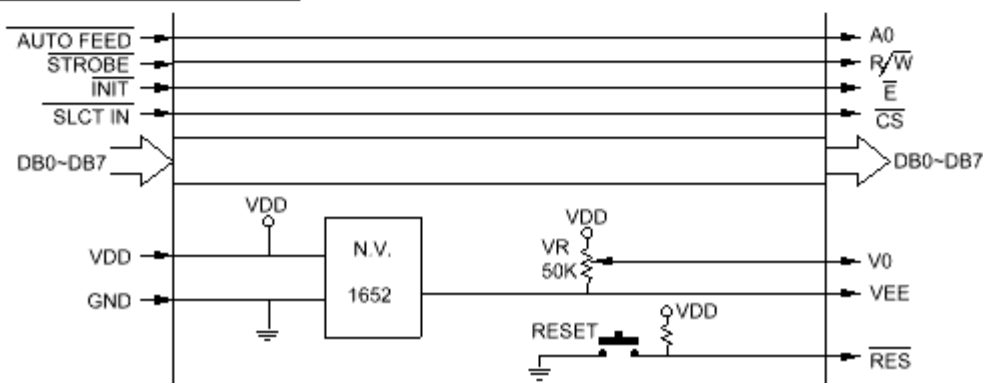
PIN NO	SIGNAL	PIN NO	SIGNAL
1	GND	14	VDD
2	V0	15	A0
3	R/W	16	$\overline{E}$
4	DB0	17	DB1
5	DB2	18	DB3
6	DB4	19	DB5
7	DB6	20	DB7
8	CS	21	$\overline{RST}$
9	VEE	22	GND
10	A	23	K
11	ERROR	24	SLCT
12	PE	25	ACK
13	BUSY		

LPT Control Byte

	SIGNAL	VALUE	OUT PUT LCVCL	
b0	STROBE	0 1	HIGH LOW	R/W
b1	AUTO FEED	0 1	HIGH LOW	A0
b2	INIT	0 1	HIGH LOW	$\overline{E}$
b3	SLCT IN	0 1	HIGH LOW	CS
b4 b7	NC			

*HIGH=+5V
LOW=0V

DC JACK	ϕ 2.1
VDD	+5V
GND	0



The tolerance unless classified $\pm 0.3\text{mm}$