



Interface		
Pin no	Symbol	Function
1	FG	Frame ground
2	VSS	Power supply (GND)
3	VDD	Power supply(+)
4	VO	Contrast Adjustment
5	VEE	Negative Voltage
6	/WR	Data write
7	/RD	Data read
8	/CE	L: chip enable
9	C/D	"H" Command, "L" Date
10	HALT	Power - saving
11	RESET	Reset signal
12	DB0	H/L Date bus line
13	DB1	H/L Date bus line
14	DB2	H/L Date bus line
15	DB3	H/L Date bus line
16	DB4	H/L Date bus line
17	DB5	H/L Date bus line
18	DB6	H/L Date bus line
19	DB7	H/L Date bus line
20	NC	No Connection
21	EL1	Power supply for backlight
22	EL2	Power supply for backlight

Feature			
Controller	T6963C	Module	129 x 102
Duty	1/128 duty	Viewing Area	101 x 82
Bias	1/12 bias	Mounting hole	122 x 95
B/L	Y/G	Character Size	0.54 x 0.54

Absolute Maximum Rating					
I tem	Symbol	Condition	Min	Max	Units
Supply for logic voltage	Vdd-Vss	25°c	-0.3	7	V
LCD driving supply voltage	Vdd-Vss	25°c	-0.3	13	V
Input voltage	Vin	25°c	-0.3	Vdd+0.3	V

Electrical Characteristics						
Item	Symbol	Condition	Min.	Typ.	Max.	Units
Power supply voltage	Vdd-Vss	25°c	4.5	-	5.5	V
LCD operation voltage	Vop	25°c	-	16.5	-	V
LED Forward Voltage	VF	25°c	-	4.2	-	V
LED Forward Current	IF	25°c	-	650	-	mA