



PIN CONNECTIONS

Pin	Symbol	Level	Function
1	FG	-	Frame ground
2	V _{SS}	0V	GND
3	V _{DD}	+5V	Power supply for logic
4	V ₀	-	Operating voltage for LCD
5	Vout	-	Negative voltage output
6	/WR	L	Write signal
7	/RD	L	Read signal
8	/CE	L	Chip enable signal
9	C/D	H/L	“L” Data, “H” Instruction code
10	/HALT	H/L	“H”: Normal, “L”: Stop osc clock
11	/REST	L	Reset signal ,active “L”
12 19	DB0 DB7	H/L	Data bus line
20	LED+	+5V	Power Supply for LED

NOTES:

1. Built-in T6963C controller, thin design
2. Yellow green mode/FSTN optional
3. Temperature compensation optional
4. LED can be driven by pin20,2 or pin21,22

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	129.0X102.0X14.0	mm
Viewing Area (W x H)	101.0X82.0	mm
Dot Pitch (W x H)	0.58X0.58	mm
Dot Size (W x H)	0.54X0.54	mm

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	V _{DD} -V _{SS}	-0.3	7.0	V
Supply Voltage (LCD)	V _{DD} -V ₀	-0.3	17.5	V
Input Voltage	V _I	-0.3	V _{DD} +0.3	V
Operating Temp.	T _{OPR}	-20	70	
Storage Temp.	T _{STG}	-30	80	

ELECTRICAL CHARACTERISTICS (V_{DD}=5.0V, Ta=25)

Item	Symbol	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	V _{DD} -2.2	-	V _{DD}	V
Input Low Voltage	V _{IL}	0	-	0.8	V
Output High Voltage	V _{OH}	V _{DD} -0.3	-	V _{DD}	V
Output Low Voltage	V _{OL}	0	-	0.3	V
Supply Current	I _{DD}	-	15	18	mA
LCD Driving Voltage	V _{DD} -V ₀	-	15.5	-	V

LED BACKLIGHT SPECIFICATIONS (Ta=25)

Item	Forward Voltage	Forward Current
GREEN/WHITE	3.1V	120mA