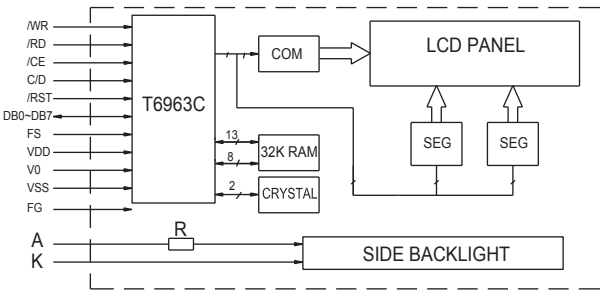


VERSION	T1	T2	UNIT
EL&NO BKL	6.2	10.0	mm
SIDE BKL	6.2	10.0	mm
LED BKL	8.8	12.5	mm

Block diagram



Interface pin connections

Pin NO	Symbol	Function
1	FG	Frame GND
2	VSS	Power supply 0V
3	VDD	Power supply +5V
4	V0	Power supply for LCD
5	/WR	Write when L
6	/RD	Read when L
7	/CE	Enable when L
8	C/D	Register select(L: Data H: Instruction)
9	RST	Reset signal when L
10 to 17	DB0 to DB7	Data bus for 8-bit mode
18	FS	Select character style 6x8 or 8x8
19	LED+	Power supply for BKL +3.6V
20	LED-	Power supply for BKL 0V

Feature

1. 128X64 dots graphic LCD moduler
2. Built-in controller (T6963C)
3. 5.0V power supply
4. STN; 1/64 duty; LED BKL or EL BKL or edge BKL

Mechanical Data

Item	Standard	Unit
Module dimension	72.0x52.7	mm
Viewing area	60.0x32.5	mm
Dot size	0.39x0.39	mm
Dot pitch	0.43x0.43	mm

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Power supply	VDD-VSS	-0.3	-----	5.5	V
Input voltage	VI	-0.3	-----	VDD	

Electronical characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Input voltage	VDD	+5V	4.7	5.0	5.5	V
		+3.3V	----	----	----	V
Supply current	I _{DD}	VDD=5V	----	1.2	----	mA
Recommended LCD riling voltage for normal temp version module	VDD-V0	-20°C	----	----	----	V
		0 °C	----	9.8	----	
		25°C	----	9.5	----	
		50°C	----	9.3	----	
LED forward voltage	V _F	25°C	----	4.2	4.5	V
LED forward current	I _F	25°C	----	240	----	mA
EL power supply current	I _{EL}	V _{EL} =110V AC 400Hz	----	----	----	mA