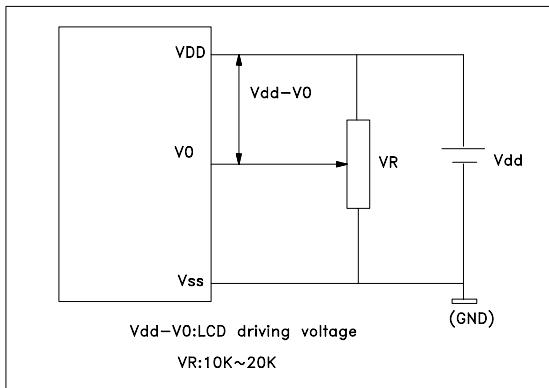
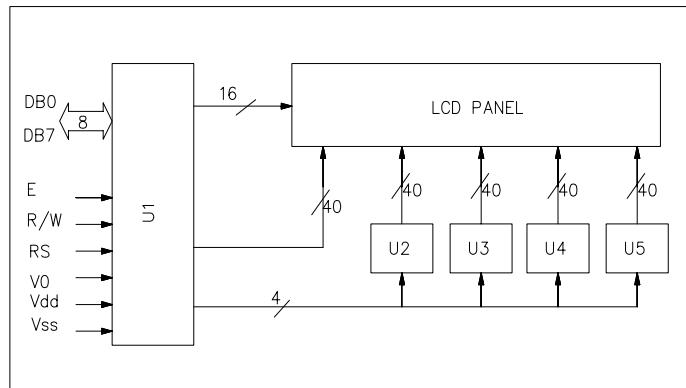


**TC4002A-03**
**■ Series**

Display Format	40 Characters X 2 Lines
Drive Method	1/16 Duty , 1/5 Bias
LCD Type	STN Yellow green
Viewing direction	6 : 00
Operating Temperature	-20C ~+60C

**■ Electrical Characteristics**

ITEM	Symbol	Condition	Standard value			UNIT
			Min.	Typ.	Max.	
Supply Voltage For Logic	$V_{DD}-V_{SS}$	--	4.5	5.0	5.5	V
Supply Voltage For LCD	$V_{DD}-V_0$	--	--	4.7	--	V
Input High Voltage	$V_{IH}$	--	2.2	--	$V_{DD}$	V
Input Low Voltage	$V_{IL}$	--	-0.3	--	0.6	V
Output High Voltage	$V_{OH}$	$-I_{OH}=0.2\text{mA}$	2.4	--	--	V
Output Low Voltage	$V_{OL}$	$I_{OL}=1.2\text{mA}$	--	--	0.4	V
Power Supply Current	$V_{DD}$	$V_{DD}=5.0\text{V}$	--	2.0	5	mA

**■ Power supply**

**■ Block Diagram**

**■ EXTERNAL DIMENSIONS AND DISPLAY PATTERN**
