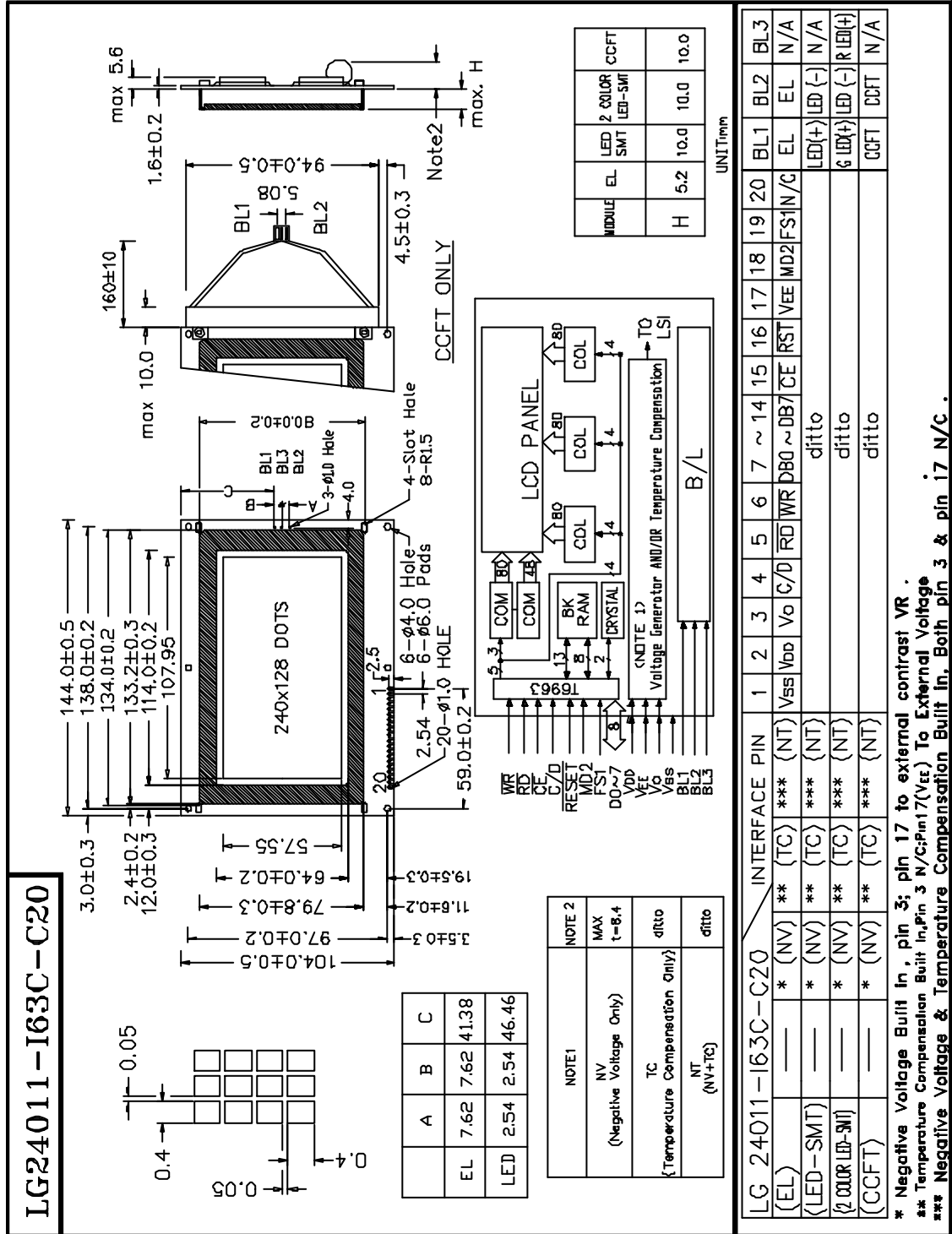


1. LCM Drawing



2. Electrical spec

LG24011-I63C-C20

2 4 0 X 1 2 8 Dots 1 / 1 2 8 D U T Y

ELECTRICAL CHARACTERISTICS

T_a = 25°C V_{DD} = 5.0 ± 0.25 V

Input "High" Voltage (V_{IH}) 2.2 V min

Input "Low" Voltage (V_{IL}) 0.8 V max

APPLICABLE FOR -LOP

	<u>FSTN</u>		<u>STN</u>	
	<u>TEMPERATURE</u>		<u>TEMPERATURE</u>	
	<u>NORMAL</u>	<u>WIDE</u>	<u>NORMAL</u>	<u>WIDE</u>
Supply Current, (I _{DD}) Typ., mA	12	12	12	12
Supply Current, (I _{EE}) Typ., mA	2.5	2.5	2.5	2.5
Supply Voltage, (V _{EE}) Typ., V	-20	-20	-20	-20

Recommend LCD drive Voltage:

(V _{DD} -V _O) at T _a = -20°C, Volts	N/A	19.6	N/A	24.3
T _a = 0°C	18.3	18.3	21.0	21.0
T _a = 25°C	17.3	17.3	18.5	18.5
T _a = 50°C	16.0	16.0	16.8	16.8
T _a = 70°C	N/A	15.0	N/A	15.7

ABSOLUTE MAXIMUM RATINGS

	<u>NORMAL</u>		<u>WIDE</u>	
	<u>TEMPERATURE</u>		<u>TEMPERATURE</u>	
	<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>
Input Voltage (V _I) V	0	V _{DD}	0	V _{DD}
Supply for Logic (V _{DD} -V _{SS}) V	0	7	0	7
Supply for LCD (V _{DD} -V _O) V	0	25	0	25
Operating Temperature T _{OP} , °C	0	+50	-20	+70
Storage Temperature T _{ST} , °C	-20	+70	-30	+80

OPTION

BACKLIGHT

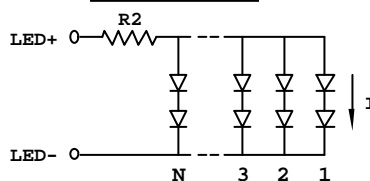
- BEXX -- EL
- BLSXX -- LED SMT
- BFEXX -- CCFT

INPUT VOLTAGE & CURRENT

100 V_{RMS} (400-800) Hz; 21.0mA
 + 5V DC; 660 mA R2 = 1.7 Ohm 2 W
 235 V_{RMS} 5.0 mA

*R2: Suggest BL current limit resistor on customer board

SMT LED



N = 110, I = 6 mA

----- **Single +5V Operation** -----

SINGLE +5V OPERATION only

- VNV
- V_{EE} self-generate --

TEMPERATURE COMPENSATION

- VNVTC (-VNT)
- V_{DD}-V_O self-generate & compensated