

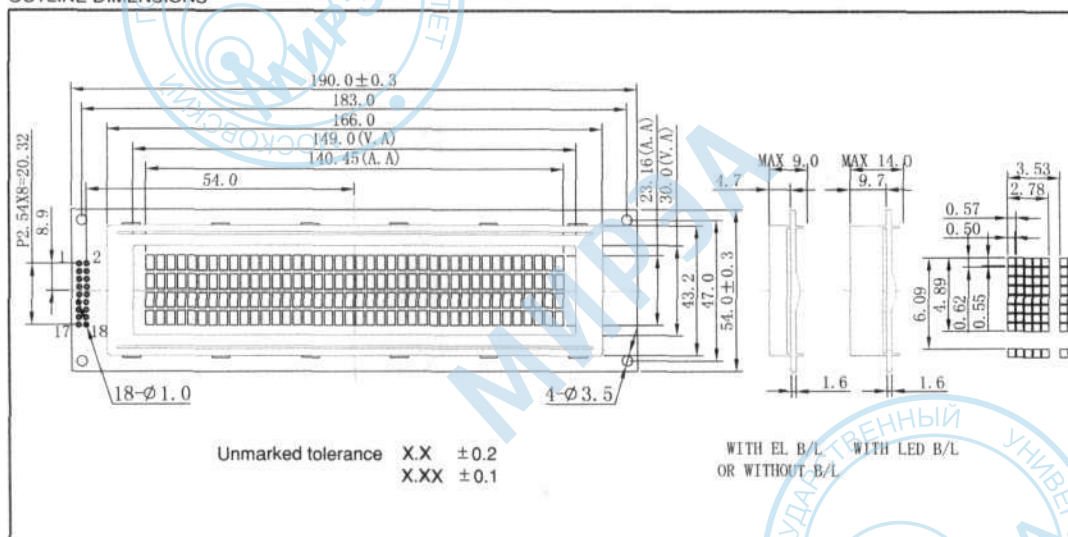
ЖИДКОКРИСТАЛЛИЧЕСКИЕ ИНДИКАТОРЫ

СИМВОЛЬНЫЕ ИНДИКАТОРЫ

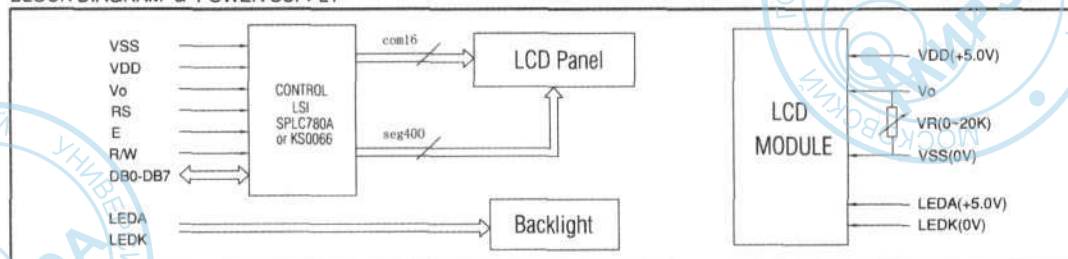
AV-DISPLAY

HY-4004A Series40x4 CHARACTERS
1/16 DUTY, 1/5 BIAS

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

Item	Normal Dimensions(mm)	FEATURE
Module Size (W*H*T)	190.0x54.0x9.0/14.0	LCD Type STN, TN, HTN, FSTN
View Area (W*H)	149.0x30.0	LCD Colour STN:Yellow-Green, Gray Other:Gray
Character Pitch(W*H)	3.53x6.09	View Angle 6 O'clock, 12 O'clock
Character Size(W*H)	2.78x4.89	Display Type Positive Type, Negative Type
Character Font	5x8	Rear polarizer Transmissive, Reflective, Transflective
Dot Pitch (W*H)	0.57x0.62	Operating Temperature 0°C ~ 50°C, -20°C ~ 70°C
Dot Size (W*H)	0.50x0.55	Backlight LED:Yellow EL:Green, Blue-Green, Blue Without

ELECTRICAL CHARACTERISTICS

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Operating Voltage	Vdd	Ta=25°C	---	5.0	---	V
Operating Voltage for LCD	Vlcd	Ta=25°C	---	4.5	---	V
Supply Current	Idd	Ta=25°C, Vdd=5.0V	---	2.0	3.0	mA
Supply Current for Backlight(LED)	If	Ta=25°C, Vf=4.05V	---	400	---	mA

INTERFACE PIN CONNECTIONS

Pin No	Symbol	Level	Description
1-8	DB7-DB0	H/L	Data Bus lines
9	E1	H/H—L	Enable signal for LCM for Chip1
10	R/W	H/L	Read/write selection (H:Read, L:Write)
11	RS	H/L	Register selection (H:Data register, L:Instruction register)
12	V0	—	Power supply for LCD drive
13	VSS	—	Ground for Logic
14	VDD	—	Power supply for Logic(+5.0V)
15	E2	H/H—L	Enable signal for LCM for Chip2
16	VEE	—	Negative voltage supply
17	LEDA	—	Power supply for Backlight(+)
18	LEDK	—	Power supply for Backlight(-)

REMARK

Operating voltage option: 5.0V or 3.0V

Pin17 and Pin18 electrode(A, K) can be exchanged

Negative type LCD colour: Blue

CGROM font option: English, Japanese, Russian, etc