

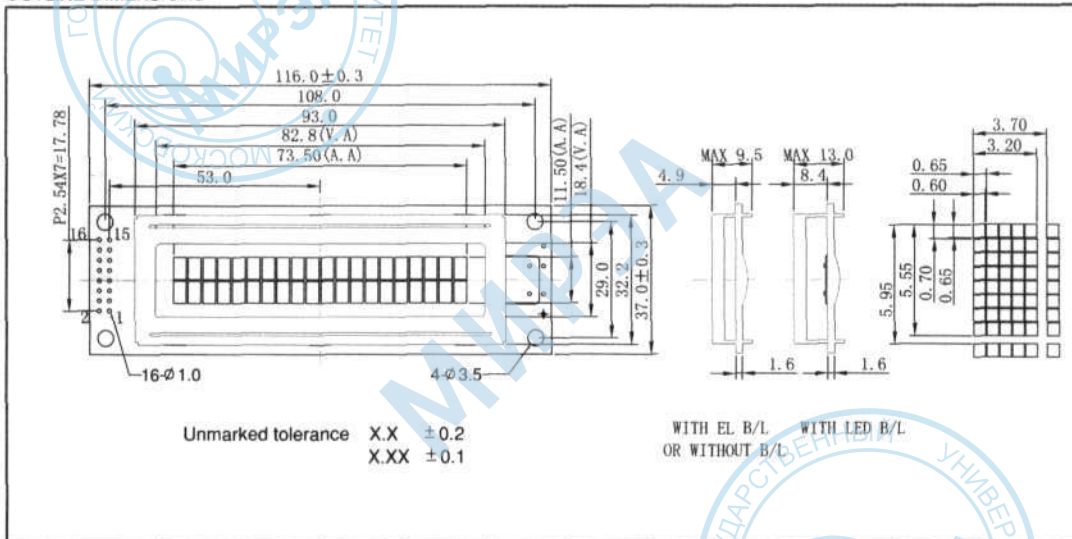
ЖИДКОКРИСТАЛЛИЧЕСКИЕ ИНДИКАТОРЫ

СИМВОЛЬНЫЕ ИНДИКАТОРЫ

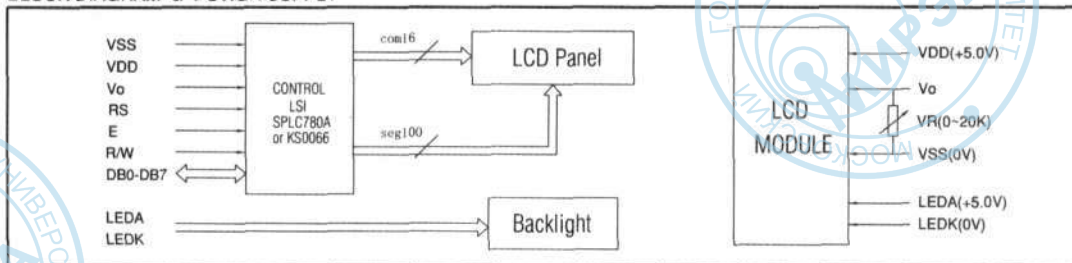
AV-DISPLAY

HY-2002A Series20x2 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)	116.0x37.0x9.5/13.0	LCD Type	STN, TN, HTN, FSTN
View Area (W*H)	82.8x18.4	LCD Colour	STN:Yellow-Green, Gray Other:Gray
Character Pitch(W*H)	3.70x5.95	View Angle	6 O'clock, 12 O'clock
Character Size(W*H)	3.20x5.55	Display Type	Positive Type, Negative Type
Character Font	5x8	Rear polarizer	Transmissive, Reflective, Transreflective
Dot Pitch (W*H)	0.65x0.70	Operating Temperature	0°C - 50°C, -20°C - 70°C
Dot Size (W*H)	0.60x0.65	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=4.2V	---	225	---	mA

INTERFACE PIN CONNECTIONS

Pin No	Symbol	Level	Description
1	VSS	--	Ground for Logic
2	VDD	--	Power supply for Logic(+5.0V)
3	Vo	--	Power supply for LCD drive
4	RS	H/L	Register selection (H:Data register, L:Instruction register)
5	R/W	H/L	Read/write selection (H:Read,L:Write)
6	E	H/H—L	Enable signal for LCM
7-14	DB0-DB7	H/L	Data Bus lines
15	LEDA	--	Power supply for Backlight(+)
16	LEDK	--	Power supply for Backlight(-)

REMARK

Operating voltage option: 5.0V or 3.0V
 Pin15 and Pin16 electrode(A, K) can be exchanged
 Negative type LCD colour: Blue
 CGROM font option: English, Japanese, Russian, etc