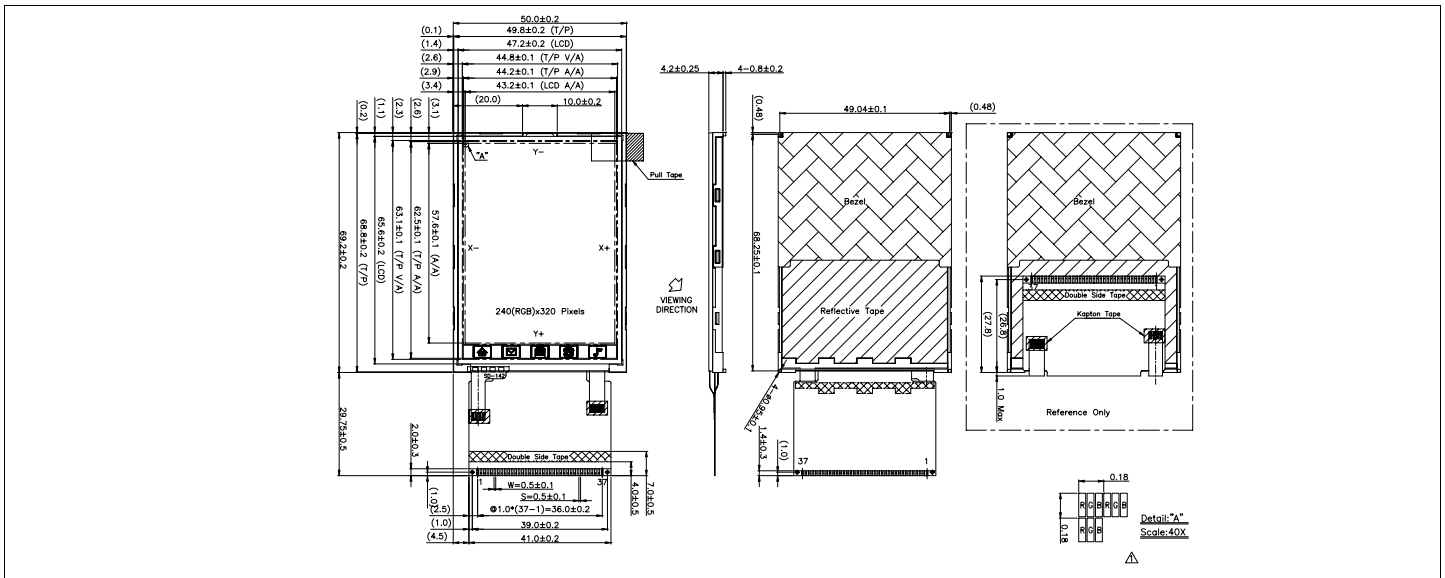


# HDA280T

## Dimensional Drawing

## 2.8" ,240 X 320 (TFT) Color Graphics ,LED(White) Backlight



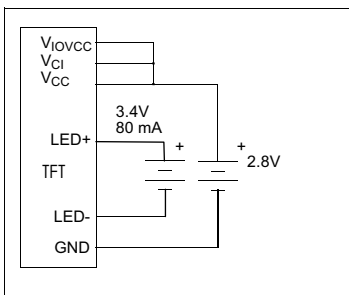
### Features

- Viewing Angle(U/D/R/L).....40/20/45/45 degrees
- High Contrast.....300:1
- Fast Response Time .....40 ms
- Built-in DC-DC Converter
- Built-in Controller.....ILI9320
- Touch Screen.....Analog- 4 Wires

### Physical Data

- Module Size.....50.0W x 98.95H x 4.2T mm
- Viewing Area Size.....44.2W x 62.5 H mm
- Pitch Size.....0.18W x 0.18 H mm
- Weight.....24 g

### Power Supply



### Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNIT
SUPPLY VOLTAGE (logic)	V <sub>CC</sub>	-0.3	4.6	V
SUPPLY VOLTAGE (analog)	V <sub>CI</sub>	-0.3	4.6	V
INPUT VOLTAGE	V <sub>IN</sub>	-0.3	V <sub>CC</sub>	V
OPERATING TEMPERATURE	T <sub>OP</sub>	-20	70	°C
STORAGE TEMPERATURE	T <sub>STG</sub>	-30	80	°C

### Electrical Characteristics (VDD=2.8±0.115V 25°C)

PARAMETER	SYM	CONDITION	MIN	TYP	MAX	UNIT
OPERATING VOLTAGE	V <sub>CC-Cl</sub> V <sub>IOVCC</sub>	-	2.4 1.65	2.8 2.8	3.3 3.3	V
INPUT HIGH VOLTAGE	V <sub>IH</sub>	-	0.8V <sub>CC</sub>	-	V <sub>CC</sub>	V
INPUT LOW VOLTAGE	V <sub>IL</sub>	-	-0.3	-	0.2V	V
OPERATING CURRENT	I <sub>DD</sub>	-	-	10	14	mA
LED FORWARD VOLTAGE	V <sub>F</sub>	at I <sub>f</sub> = 80 mA	-	3.4	-	V
LED FORWARD CURRENT	I <sub>F</sub>	at V <sub>f</sub> = 3.4V	-	80	-	mA
BRIGHTNESS	L	Average	-	150	-	cd/m <sup>2</sup>

### Pin Connections

PIN NO.	SYMBOL		FUNCTION
1	Db01	H/L	Bi-directional Data BUS (8,16 Bit wide)
2	Db02	H/L	
3	Db03	H/L	
4	Db04	H/L	
5	GND	I	Ground
6	VCC	I	Power Supply Voltage (Internal Logic)
7	nCS	L	Chip Select Input
8	RS	H/L	Control-Index Select Input
9	nWR	L	Write Strobe Input
10	nRD	L	Read Strobe Input
11	IM 0	H/L	MPU Interface Select
12	X+	-	Touch Panel Left
13	Y+	-	Touch Panel Up
14	X-	-	Touch Panel Right
15	Y-	-	Touch Panel Down
16	LED-A	I	LED Anode
17	LED-K1	I	LED Cathode
18	LED-K2	I	LED Cathode
19	LED-K3	I	LED Cathode
20	LED-K4	I	LED Cathode
21	IM 3	H/L	MPU Interface Select
22	Db05	H/L	Bi-directional Data BUS (8,16 Bit wide)
23	Db10	H/L	
24	Db11	H/L	
25	Db12	H/L	
26	Db13	H/L	
27	Db14	H/L	
28	Db15	H/L	
29	Db16	H/L	
30	Db17	H/L	
31	nRESET	L	Reset Input
32	VCI	I	Power Supply Voltage (Analog)
33	IOVCC	I	Power Supply Voltage (Interface)
34	GND	I	Ground
35	Db06	H/L	Bi-directional Data BUS (8,16, Bit wide)
36	Db07	H/L	
37	Db08	H/L	