

1. INTRODUCTION

Ampire Display Module AM640480G is a color active matrix TFT-LCD that uses amorphous silicon TFT as a switching device . This model is composed of a 5.7inch TFT-LCD panel , a driving circuit and LED backlight system . This TFT-LCD has a high resolution (640(R.G.B) X 480) and can display up to 262,144 colors .

1-1. Features

- VGA Resolution
- 6 Bits color driver with 1 channel TTL interface
- Wide range operation temperature

1-2. Applications

- Portable TV
- Car PC
- Industrial application
- HMI (Human machine interface)

2. PHYSICAL SPECIFICATIONS

| Item | Specifications | unit |
|-------------------------|----------------------------------|-------------------|
| Display resolution(dot) | 640RGB (W) x 480(H) | dots |
| Display area | 116.16 (W) x 87.12 (H) | mm |
| Pixel pitch | 0.1815 (W) x 0.1815 (H) | mm |
| Color configuration | R.G.B Vertical stripe | |
| Overall dimension | 127.0(W)x100.0(H)x6.6(D)---(Typ) | mm |
| Surface treatment | Antiglare , Hard-Coating(3H) | |
| Brightness | 220 nit(typ) | cd/m ² |
| Contrast ratio | 300 : 1 | |
| Backlight unit | LED | |
| Display color | 262,144 | colors |

3. ABSOLUTE MAX. RATINGS

| ITEM | SYMBOL | MIN | MAX | UNIT | NOTE |
|-----------------------|--------------------------------------|------|-----------|------|------|
| Power Supply Voltage | Vcc | -0.5 | 5 | V | |
| Signal Input Voltage | DCLK , DE R0~R5 G0~G5 B0~B5 | -0.5 | Vcc + 0.5 | V | |
| Static Electricity | VESDc | -200 | +200 | V | (2) |
| | VESDm | -15K | +15K | V | |
| ICC Rush Current | IRUSH | -- | 1 | A | (3) |
| Operation Temperature | Top | -30 | 85 | °C | (1) |
| Storage Temperature | Tstg | -40 | 95 | °C | (1) |

NOTE :

1. If users use the product out off the environment operation range (temperature and humidity) , it will concern for visual quality.
2. Test Condition : IEC 61000-4-2
VESDc : Contact discharge to input connector.
VESDm : Contact discharge to module.
3. The input pulse-current measurement system as below :

