



| PS | Type     | CS1B | CS2 | MI | Interface mode       |
|----|----------|------|-----|----|----------------------|
| H  | Parallel | CS1B | CS2 | H  | 6800-series MPU mode |
|    |          |      |     | L  | 8080-series MPU mode |
| L  | Serial   | CS1B | CS2 | *  | Serial-mode          |

| MI | CS1B | CS2 | RS | E_RD | RW_WR | DB0 to DB7 | MPU bus     |
|----|------|-----|----|------|-------|------------|-------------|
| H  | CS1B | CS2 | RS | E    | RW    | DB0 to DB7 | 6800-series |
| L  | CS1B | CS2 | RS | /RD  | /WR   | DB0 to DB7 | 8080-series |

| Interface |          |        |        |
|-----------|----------|--------|--------|
| Pin no    | Symbol   | Pin no | Symbol |
| 1         | CS1B     | 16     | VSS    |
| 2         | RESETB   | 17     | VDD    |
| 3         | RS       | 18     | VOUT   |
| 4         | /WR(R/W) | 19     | CAP3+  |
| 5         | RD       | 20     | CAP3-  |
| 6         | DB0      | 21     | CAP1+  |
| 7         | DB1      | 22     | CAP1-  |
| 8         | DB2      | 23     | CAP2+  |
| 9         | DB3      | 24     | CAP2-  |
| 10        | DB4      | 25     | V0     |
| 11        | DB5      | 26     | V1     |
| 12        | DB6      | 27     | V2     |
| 13        | DB7      | 28     | V3     |
| 14        | MI       | 29     | V4     |
| 15        | PS       | 30     | NC     |

| Feature    |            |                |             |
|------------|------------|----------------|-------------|
| Controller | S6B1713A11 | Module         | 58 x 39.5   |
| Duty       | 1/64 duty  | Viewing Area   | 53 x 27.5   |
| Bias       | 1/9 bias   | Mounting hole  | -           |
| B/L        | WHITE      | Character Size | 0.34 x 0.34 |

| Absolute Maximum Rating    |         |           |      |         |       |
|----------------------------|---------|-----------|------|---------|-------|
| I tem                      | Symbol  | Condition | Min  | Max     | Units |
| Supply for logic voltage   | Vdd-Vss | 25°C      | -0.3 | 7       | V     |
| LCD driving supply voltage | Vdd-Vss | 25°C      | -0.3 | 13      | V     |
| Input voltage              | Vin     | 25°C      | -0.3 | Vdd+0.3 | V     |

| Electrical Characteristics |         |           |      |      |      |       |
|----------------------------|---------|-----------|------|------|------|-------|
| Item                       | Symbol  | Condition | Min. | Typ. | Max. | Units |
| Power supply voltage       | Vdd-Vss | 25°C      | 2.4  | -    | 3.6  | V     |
| LCD operation voltage      | Vop     | 25°C      | -    | 8.7  | -    | V     |
| LED Forward Voltage        | VF      | 25°C      | -    | 3.2  | -    | V     |
| LED Forward Current        | IF      | 25°C      | -    | 80   | -    | mA    |