



Winstar Display Co., LTD 華凌光電股份有限公司



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SPECIFICATION

CUSTOMER : _____

MODULE NO.: **WS-USB#** _____

APPROVED BY: (FOR CUSTOMER USE ONLY)	
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SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
ISSUED DATE:			

1.Mechanical Data

Item	Standard Value	Unit
Module Dimension	58x32.25	mm
Mounting hole	3.0	mm

2.Electrical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			Min.	Typ.	Max.	
Input Voltage	VDD	VDD=5v	4.5	5.0	5.5	V
Supply Current	VIO	VDD=5V	7.5	10	12.0	mA

3.Feature

1. for character module control only (unless 4004).

Pin NO.	Symbol	Function
1	VDD	Dc+5V
2	USBDM	USB data signal Minus
3	USBDP	USB data signal Plus
4	GND	Power Ground
5	GND	Power Ground

4.Communication Protocol:

Start Code	Data Type	Data	End Code
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(1) Baud Rate: 9600,N,8,1

(2) Start Code: It means the package at 1st Byte, The value of Start Code is "E7H"

(3) Data Type: It describes the usage of data. It has 3 types will show as below:

[1] "C" means **Command**.

[2] "D" means **Data**.

[3] "B" means **Backlight Control**;

Data == 0 means Backlight **OFF**.

Data == 1 means Backlight **ON**.

(4) Data: It is for LCD control use.

(5) End Code: It means the package at last Byte, The value of End Code is "7EH".

6. Contour Drawing

