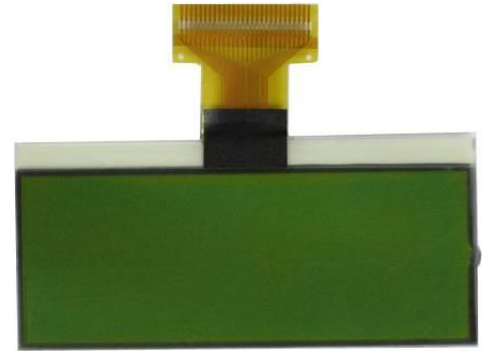


# TSG12848A Series

## Display Feature

Item	Value
Structure	COG
LCD Display Mode	STN-YG, Positive, Transflective
Viewing Angle	6H
Driving Method	1/65 duty, 1/9 bias
Backlight	Nil
Control/Driver IC	ST7565R



## Mechanical Data

Item	Value
Outline	78.7 x 35.9 x 2.8Max.
Viewing Area	75.3 x 28.3
Active Area	66.52 x 24.92
Dot Pitch	0.52 x 0.52
Dot Size	0.48 x 0.48

Various LCD Type Available

Various Backlight Color Available

## Electrical Characteristics

Item	Symbol	MIN.	TYP.	MAX.
Operating Voltage(V)	VDD	3.0	3.3	3.6
Input High Voltage(V)	VIH	0.8V <sub>DD</sub>	-	VDD
Input Low Voltage(V)	VIL	V <sub>SS</sub>	-	0.2V <sub>DD</sub>
Operating Current(mA)	IDD	-	-	5.0
Forward Voltage(V)	Vf BL	-	-	-
Forward Current(mA)	If BL	-	-	-

## Absolute Maximum

Item	MIN.	MAX.
Operating Voltage(V)	0	3.6
Operating Temperature(°C)	-10	+60
Storage Temperature(°C)	-20	+70

## Terminal Function

No.	Pin Name	Descriptions	No.	Pin Name	Descriptions
1	/CS1	Chip enable	17	C1-	Capacitor negative connection
2	/RES	Reset signal	18	C1+	Capacitor positive connection
3	A0	Command / data selection	19	C2+	Capacitor positive connection
4	WR(RW)	Write signal	20	C2-	Capacitor negative connection
5	/RD(E)	Read signal	21~25	V4~V0	Drive supply voltage
6~13	DB0~DB7	Data bus lines	26	C86	80/68 interface selection
14	VSS	Power supply (GND)	27	P/S	Parallel / serial selection
15	V <sub>OUT</sub>	Voltage converter input/output	28	VDD	Positive Power supply
16	C3+	Capacitor positive connection	-	-	-

## Outline Drawing

