

# TSM12864F Series

## Display Feature

Item	Value
Structure	COB With Metal Frame
LCD Display Mode	STN-YG, Positive, Transflective
Viewing Angle	6H
Driving Method	1/64 duty, 1/9 bias
Backlight	White LED Backlight
Control/Driver IC	S6B0107/S6B0108

## Mechanical Data

Item	Value
Outline	54.0 x 50.0 x 12.5Max.
Viewing Area	44.5 x 30.0
Active Area	40.92 x 26.81
Dot Pitch	0.32 x 0.39
Dot Size	0.28 x 0.35



## Absolute Maximum

Item	MIN.	MAX.
Operating Voltage(V)	0	6.0
Operating Temperature(°C)	-20	+70
Storage Temperature(°C)	-30	+80

## Electrical Characteristics

Item	Symbol	MIN.	TYP.	MAX
Operating Voltage(V)	V <sub>DD</sub>	4.5	5.0	5.5
Input High Voltage(V)	V <sub>IH</sub>	0.7V <sub>DD</sub>	-	V <sub>DD</sub>
Input Low Voltage(V)	V <sub>IL</sub>	V <sub>SS</sub>	-	0.3V <sub>DD</sub>
Operating Current(mA)	I <sub>DD</sub>	-	3.0	5.0
Forward Voltage(V)	V <sub>f</sub> BL	-	5.0	-
Forward Current(mA)	I <sub>f</sub> BL	-	45	60

## Terminal Function

No.	Pin Name	Descriptions
1	VSS	Power Supply, (0V)
2	VDD	Positive Power Supply
3	V0	LCD Contrast Reference Supply
4	RS	Register Select
5	R/W	Read/write Signal
6	E	Data Enable
7	DB0	Data Bus Line
:	:	
14	DB7	
15	CS1	Chip Enable ( left-half panel )
16	CS2	Chip Enable ( right-half panel )
17	/RST	Reset Signal
18	Vout	Negative voltage output for LCD
19	BLA	Backlight Power Supply Anode
20	BLK	Backlight Power Supply Cathode

## Outline Drawing

