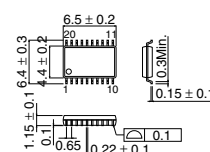


On Screen Display IC BU2993FV

● Description

The BU2993FV is a character generator IC designed for TV monitors and any other displays. It supports several features such as 512 characters display, 12-line × 28-character display, color and size of characters selectable, choice of background colors, 3-D displays, and 3-wire fixed 16 bit serial interface.

Dimension (Units:mm)



● Features

- 1) 12-line × 28-character display
- 2) 512 character types
- 3) 4bit character color code
- 4) Character size can be selected from 4 sizes.
- 5) 3-D display possible for each character
- 6) Negative/positive display switch
- 7) Characters are displayed in a 12 × 18 dot matrix.
- 8) 3-wire fixed, 16 bit serial interface
- 9) Compatible with custom font

SSOP-B20

● Applications

DVC, Camcoders, DSC, Video-CD, DVD, Car navigation

● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V _{DD}	-0.3~+7.0	V
Terminal voltage	V _{IN}	-0.3~V _{DD} +0.3	V
Storage temperature range	T _{stg}	-50 ~+125	°C
Power dissipation	P _D	400 *	mW

*Derating: 4.0mW/°C for operation above Ta=25°C.

●Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	V _{DD}	2.4	—	3.6	V
Operating frequency	F _{OSC}	6.0	—	17.8	MHz

●Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Current consumption	I _{DD}	—	3.9	6.0	mA	V _{CC} =2.7V, f _{CLK} =8MHz
		—	5.0	7.0	mA	V _{CC} =3.3V, f _{CLK} =8MHz
Low input voltage	V _{IL}	0	—	0.2V _{DD}	V	
High input voltage	V _{IH}	0.8V _{DD}	—	V _{DD}	V	
Low input current	I _{IL}	—	—	10	μA	V _{IL} =0V
		25	50	100	μA	
High input current	I _{IH}	—	—	10	μA	V _{IH} =3.0V
Low output voltage	V _{OL}	—	—	0.1V _{DD}	V	I _{OL} =4.0mA
		—	—	0.1V _{DD}	V	I _{OL} =0.5mA, OSCOUT
High output voltage	V _{OH}	0.9V _{DD}	—	—	V	I _{OL} =4.0mA
		0.9V _{DD}	—	—	V	I _{OL} =0.5mA, OSCOUT

●Application circuit

