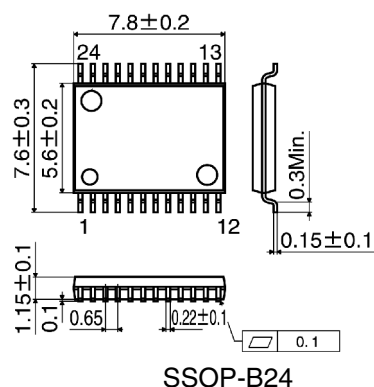


Clock generator IC BU2285FV

●Description

The BU2285FV is an IC which produces plural clocks required for a DVD system from an external crystal oscillator and a built-in 2-channel PLL. Seven kinds of signals such as 54MHz, 27MHz and 13.5 MHz for a video clock, 33.8688MHz and 16.9342MHz for a CD clock, 36.864MHz and 18.432MHz for a DVD clock can be outputted with low jitter and high S/N.

●Dimension (Units : mm)



●Features

- 1) Available with seven output clock signals
- 2) All output low jitter(No load 30ps)
High S/N (More than 50dB)
- 3) No need for additional components
(BU2285FV has a PLL loop filter inside)
- 4) 3.3V single power supply

●Applications

DVD system

●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	3.0 ~ 3.6	V
Power dissipation	P _d	630	mW
Operating temperature range	T _{opr}	-5 ~ +70	°C
Storage temperature range	T _{stg}	-30 ~ +25	°C

Derating : 6.3mW/°C for operation above Ta=25°C.

●Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	V _{DD}	3.0	3.3	3.6	V

●Electrical characteristics (Unless otherwise noted, Ta=25°C, Vcc=3.3V, XTAL=36.864MHz)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Operating circuit current	I _{DD}	—	30	50	mA	No load
CLK54M	CLK54M	—	54	—	MHz	XTAL 375/128/2
CLK27M	CLK27M	—	27	—	MHz	XTAL 375/128/4
CLKDAC	CLKDAC	—	27/13.5	—	MHz	XTAL 375/128/(4 or 8)
CLK33M	CLK33M	—	33.8688	—	MHz	XTAL 147/40/4
CLK16M	CLK16M	—	16.9344	—	MHz	XTAL 147/40/8
CLKA	CLKA	—	36.864	—	MHz	XTAL
		—	33.8688	—	MHz	XTAL 147/40/4
CLKB	CLKB	—	18.432	—	MHz	$\frac{1}{2}$ XTAL
		—	16.9344	—	MHz	XTAL 147/40/8
DUTY	DUTY	45	50	55	%	$\frac{1}{2}$ V _{DD} test
Jitter	Jstd1	—	—	100	psec	Short term jitter 1 , No load

●Application circuit

