Sound processor for radio cassette recorder and mini component stereo

BD3881FV/BD3882FV

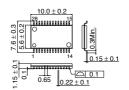
Description

The BD3881FV incorporates a sound controller with built-in EQ for playing and recording of cassette tape recorder. When the tape recorder is not used, the equalizer can be used as an ordinary input selector. The sound controller block is simply composed of 2-band tones and volume.

The BD3882FV incorporates rear volume for improving SN and 3-band tones. The BD3882FV has nearly the same pin assignment as the BD3881FV and both can be used in a variety of applications.

Dimension (Unit : mm)

BD3881FV

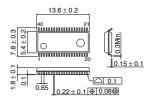


SSOP-B28

Features

- 1) Built-in EQ for recording and playing of cassette tape recorder
- 2) Suitable for karaoke (soft)
- 3) Enable to design boards easily for set series due to the same pin assignment of BD3881FV and BD3882FV
- 4) Low noise, low distortion and low power consumption

BD3882FV



SSOP-B40

Applications

CD radio cassette recorder, Mini component stereo, Micro component stereo

Absolute Maximum Ratings (Ta=25°C)

• / 1500 1510 1110 1111 1 1511 1 1511 1 151 1 1 1							
Parameter		Symbol	Limits	Unit			
Applied voltage		VDD	5				
		VEE	- 5	V			
Power	BD3881FV	Pd	850 *1	\A/			
dissipation	BD3882FV	Fu	900 *2	mW			
Operating temperature range		Topr	− 20 ~ +75	°C			
Storage temperature range		Tstg	- 55 ~ +125	°C			

^{*1} Derating : 8.5mW/°C for operation above Ta=25°C

Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Min. Typ.		Unit
Operating voltage range	VDD	3.5	-	4.75	V
Operating voltage range	VEE	- 4.75	_	-3.5	V

^{*2} Derating : 9.0mW/°C for operation above Ta=25°C *PCB (70mmx70mm, t=1.6mm) glass epoxy mounting

Electrical characteristics

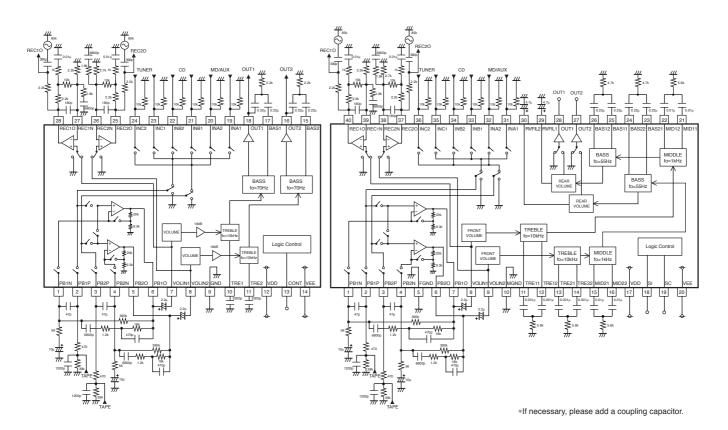
 $(Unless \ otherwise \ noted; Ta=25^{\circ}C,\ VDD=4.5V,\ VEE=-4.5V,\ f=1kHz,\ Vin=50mVrms,\ Rg=600\Omega,\ RL=10k\Omega,\ Input\ selector=Ach,\ Volume=0dB,\ Bass=0dB,\ Treble=0dB)$

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
VDD circuit current at no signal	IQVDD	_	3.0(4.5)	8.0(10.0)	m A	VIn=0Vrms	
VEE circuit current at no signal	IQVEE	-8.0(-10.0)	-3.0(-4.5)	-	mA	vin=uvrms	
Total harmonic distortion rate	THD	_	0.02(0.01)	0.1	%	BPF=400-30kHz	
Output noise voltage	Vno	_	12(22)	20(60)	μVrms	(BPF=IHF-A), Rg=0Ω	
Residual noise voltage	Vmno	_	12(3)	20(8)	μVrms	(BPF=IHF-A), Rg=0Ω	
Bass control range	Gbcr	+18(±11)	+21(±14)	+24(±17)	dB	Vin=5mVrms, (Vin=10mVrms)	
Treble control range	Gtcr	+12(±11)	+14(±14)	+16(±17)	dB	(Vin=10mVrms), TREBLE=±14dB	
Middle control range	Gmcr	(±11)	(±14)	(±17)	dB	Vin=10mVrms, MIDDLE=±14dB	

● Application Circuit (BD3881FV/BD3882FV)

BD3881FV

BD3882FV



^() is a characteristic of BD3882FV.

*Phase relation between I/O signal terminals is the same phase.

*This product is not designed for protection against radioactive rays.

Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any
 means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the
 product described in this document are for reference only. Upon actual use, therefore, please request
 that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard
 use and operation. Please pay careful attention to the peripheral conditions when designing circuits
 and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or
 otherwise dispose of the same, no express or implied right or license to practice or commercially
 exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document use silicon as a basic material.
 Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.

In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.

