

BH7826FVM

Communication ICs

Audio driver IC for mobile phones

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BH7826FVM is an audio driver IC developed for mobile · audio products such as mobile phones. Low voltage operation, and low power consumption can be realized. Differential input is available for this IC.

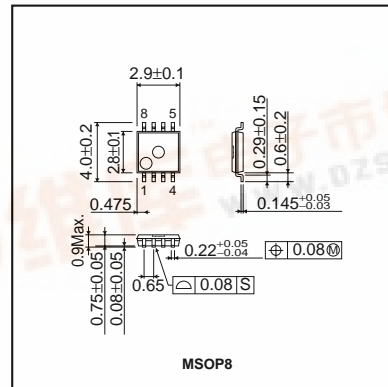
●Applications

Mobile phones, PDA, Notebook PC, DSC, DVC

●Features

- 1) BTL monaural power amplifier.
- 2) High power 500mW / 8Ω / BTL output.
- 3) Wide supply voltage range.
- 4) For active / shutdown mode.
- 5) Built-in anti-pop circuit / thermal shutdown circuit

●External dimensions (Units : mm)



●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Applied voltage	Vcc MAX.	6.0	V
Power dissipation	Pd	470 *1	mW
Operating temperature range	Topr	-30~+85 *2	°C
Storage temperature range	Tstg	-55~+125	°C

*1 Derating 4.7mW/°C for operation above Ta=25°C. 70mm×70mm×1.6mm glass epoxy mounting.

*2 TOPR=-70~85°C is basic operation range, characteristic and rated output are not guaranteed. In this range if the input signal is exceeded, TSD (Thermal Shutdown) may operate.

●Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating supply voltage range	Vccs	2.6	3.6	5.5	V

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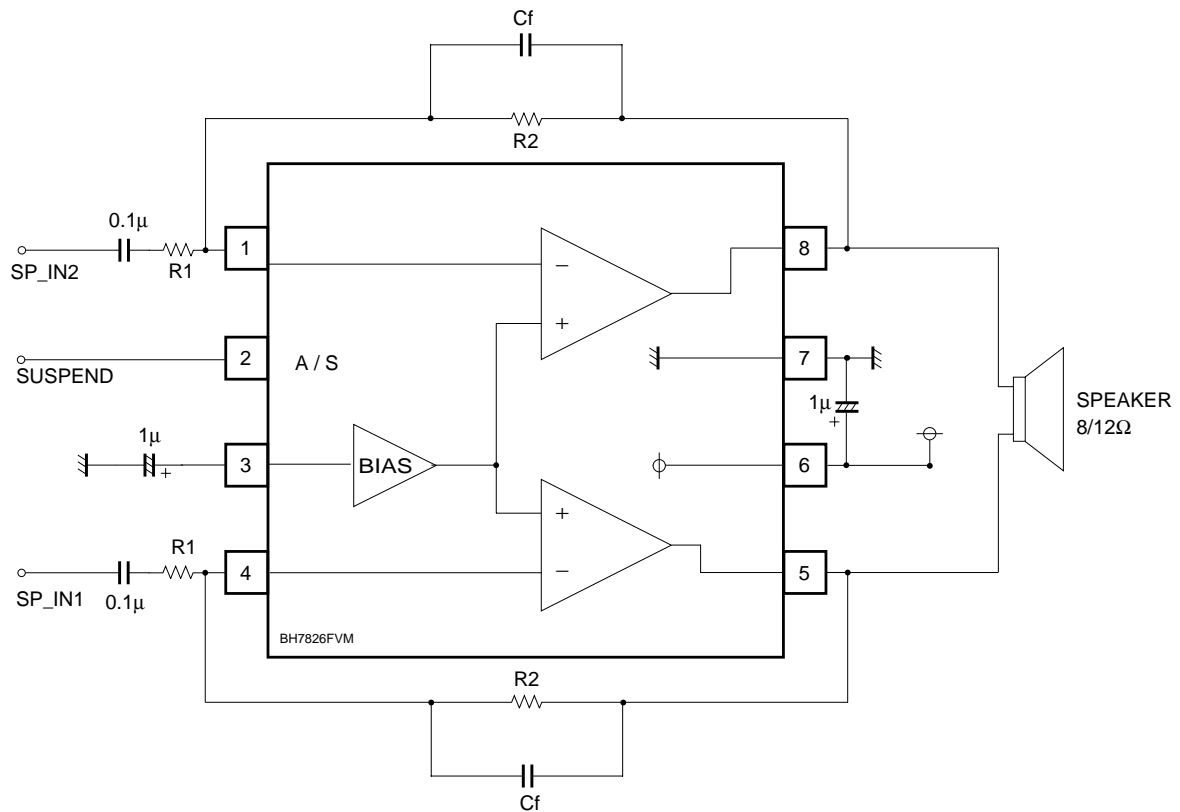
●Electrical characteristics (Unless otherwise noted, $T_a=27^\circ\text{C}$, $V_{CC}=-3.6\text{V}$, $f=1\text{kHz}$, $R_L=8\Omega$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current 1	I_{CC1}	-	3.5	7	mA	No signal, Active MODE
Circuit current 2	I_{CC2}	-	0	2	μA	No signal, Suspend MODE
Voltage gain	G_{V1}	+9.5	+11.5	+13.5	dB	$V_{IN1}=V_{IN2}=-20\text{dBV}$, $R_f/R_s=100\text{k}/22\text{k}$, SE *1
Maximum output voltage 1	V_{OM1}	+4.0	+6.0	-	dBV	DSTN=1% BTL *1
Distortion rate	DSTN	-	0.2	1.0	%	$V_{IN1}=V_{IN2}=-20\text{dBV}$ SE *1
Output residual noise	V_{NO}	-	-94	-80	dBV	No signal, SE, Active MODE *2
Suspend attenuation value	G_S	-	-107	-80	dBV	$V_{IN1}=V_{IN2}=-20\text{dBV}$, BTL *2
BIAS setting voltage	V_{BIAS}	1.6	1.8	2.0	V	3pin DC voltage
Suspend holding voltage / H	V_{SH}	2.0	-	V_{CC}	V	Active MODE, Hold voltage
Suspend holding voltage / L	V_{SL}	0	-	0.5	V	Suspend MODE, Hold voltage

*1 : B.W.=0.4~30kHz

*2 : DIN AUDIO

●Application Circuit



Notes

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