# DATA SHEET

Part No.	AN5832SA	
Package Code No.	SSOP032 - P - 0300AP	

### SEMICONDUCTOR COMPANY MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

## Panasonic

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## AN5832SA Silicon Monolithic Bipolar IC

#### Features

- Supports both I<sup>2</sup>C bus and parallel control
- Integrated SIF demodulation
- Fully adjustment free ( when used with SIF input ) 2 adjustment points when used with baseband input
- Integrated voice AGC circuit
- Reduced peripheral component count
- Low power consumption ( typ.  $V_{CC} = 5 \text{ V}, I_{TOT} = 28 \text{ mA}$  )
- Near pin to pin compatible with AN5833SA ( Japanese TV audio multiplex demodulation IC )

#### Applications

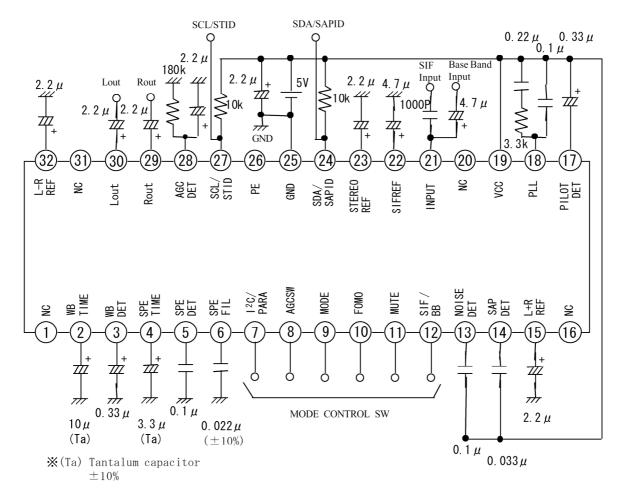
• TV sets, VCRs, DVD recorders, PCs, car navigation systems, and similar products for US market

#### Package

• DIL-32PIN Plastic Package (SO Type)

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#### Application Circuit



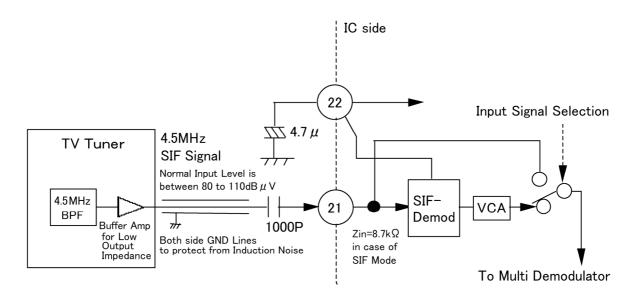
< Instructions of Application Circuits >

1) In case of using base band input, ICs were adjusted to perform good separation when input level ismatched with 100 mV[rms] (= 283 mV[p-p]) on condition of mono 100% mod pre-emphasis OFF. However, if good enough separation can't be taken in the cause of un-matching frequency characteristic and so in input signal, it can adjust separation by connecting a volume between #22Pin and GND for adjusting high frequency separation. If it not need adjusting separation, please open #22Pin. If it need adjusting low frequency separation also, please adjust the input level volume for taking best separation on low frequency.

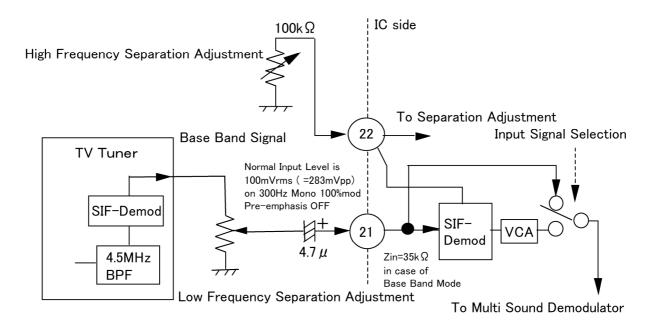
- 2) In case of using SIF input, please set up the SIF input level from tuners between 80 dBμV to 110 dBμV in standard RF input conditions. Please select SIF BPFs that group delay of 4.5 MHz ±42 kHz is flat as possible.
- 3) In measuring characteristics of separation, please use the stereo modulator that perform good characteristic on dbx encoder and corrected well.
  In case of using SIF input, please correct FM modulation band to ±25 kHz exactly at mono 100% mod pre-emphasis OFF with the 0 carrier method.
  And, please use LPFs that reduce 30 kHz signal over 20 dB setting between line-outs and AB level meter

#### Application Circuit ( continued )

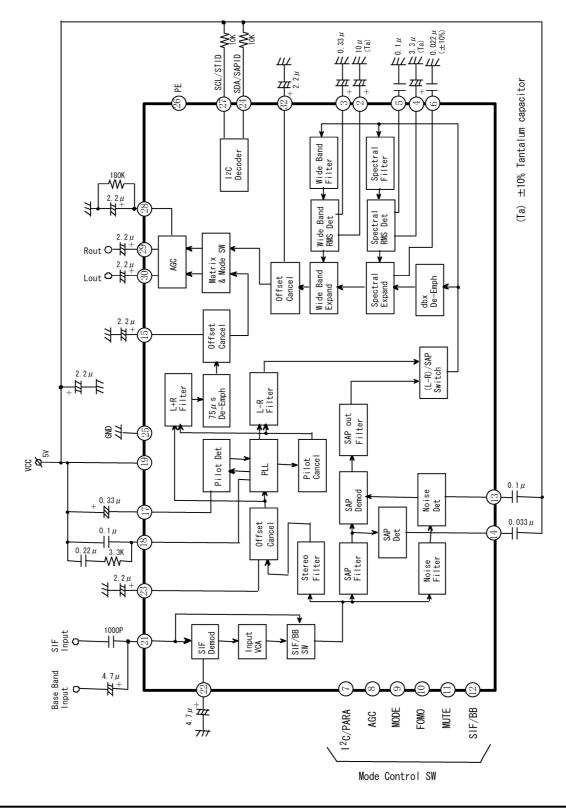
(1) Example of No Adjustments Application Circuits in case of SIF Input



(2) Example of Adjustments Application Circuits in case of Base Band Input



#### Block Diagram



SDB00096AEB

#### Pin Descriptions

Pin No.	Function	
1	N. C.	
2	Wide band timing	
3	Wide band DET	
4	Wide band DET	
5	Spectral DET	
6	Spectral DET	
7	I <sup>2</sup> C Spectral DET	
8	Spectral DET	
9	MODE SW	
10	Force monaural SW	
11	Mute SW	
12	SIF / Base band SW	
13	SAP Noise DET	
14	SAP DET	
15	L + R REF	
16	N. C.	
17	Pilot DET	
18	Stereo PLL filter	
19	V <sub>cc</sub>	
20	N. C.	
21	SIF IN	
22	SIF REF	
23	STEREO REF	
24	SDA / SAPID	
25	Ground	
26	PE	
27	SCL / STID	
28	AGC DET	
29	Right - channel output	
30	Left - channel output	
31	N. C.	
32	L - R REF	

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#### Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Note
1	Storage temperature	T <sub>stg</sub>	-55 to +125	°C	*1
2	Operating ambient temperature	T <sub>opr</sub>	-20 to +85	°C	*1
3	Operating ambient atmospheric pressure	P <sub>opr</sub>	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
4	Operating constant gravity	G <sub>opr</sub>	9 810	m/s <sup>2</sup>	
5	Operating shock	S <sub>opr</sub>	4 900	m/s <sup>2</sup>	
6	Supply voltage	V <sub>CC</sub>	6.0	v	
7	Supply current	I <sub>CC</sub>	38	mA	
8	Power dissipation	P <sub>D</sub>	228	mW	$T_a = 85^{\circ}C$

Note ) \*1 :  $T_a = 25^{\circ}C$  except storage temperature, and operating ambient temperature.

\*2: To use this products including dbx - TV noise reduction need the license agreement with THAT corporation.

#### Operating Supply Voltage Range

Operating supply voltage range	V <sub>CC</sub>	4.5 V to 5.5 V
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