

AN8817SB

2ch. Linear Driver IC for CD/CD-ROM

■ Overview

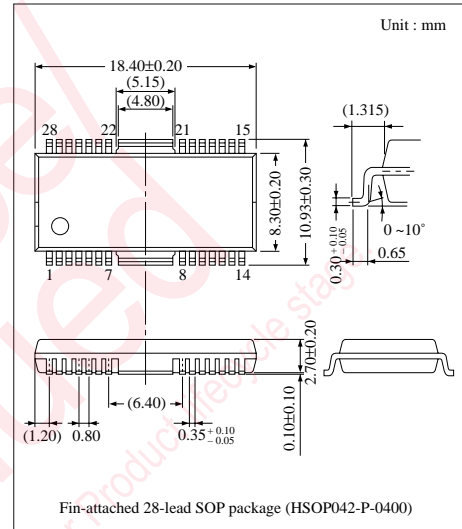
The AN8817SB is a 2ch. driver using the power operational amplifier method. It employs the surface mounting type package superior in radiation characteristics.

■ Features

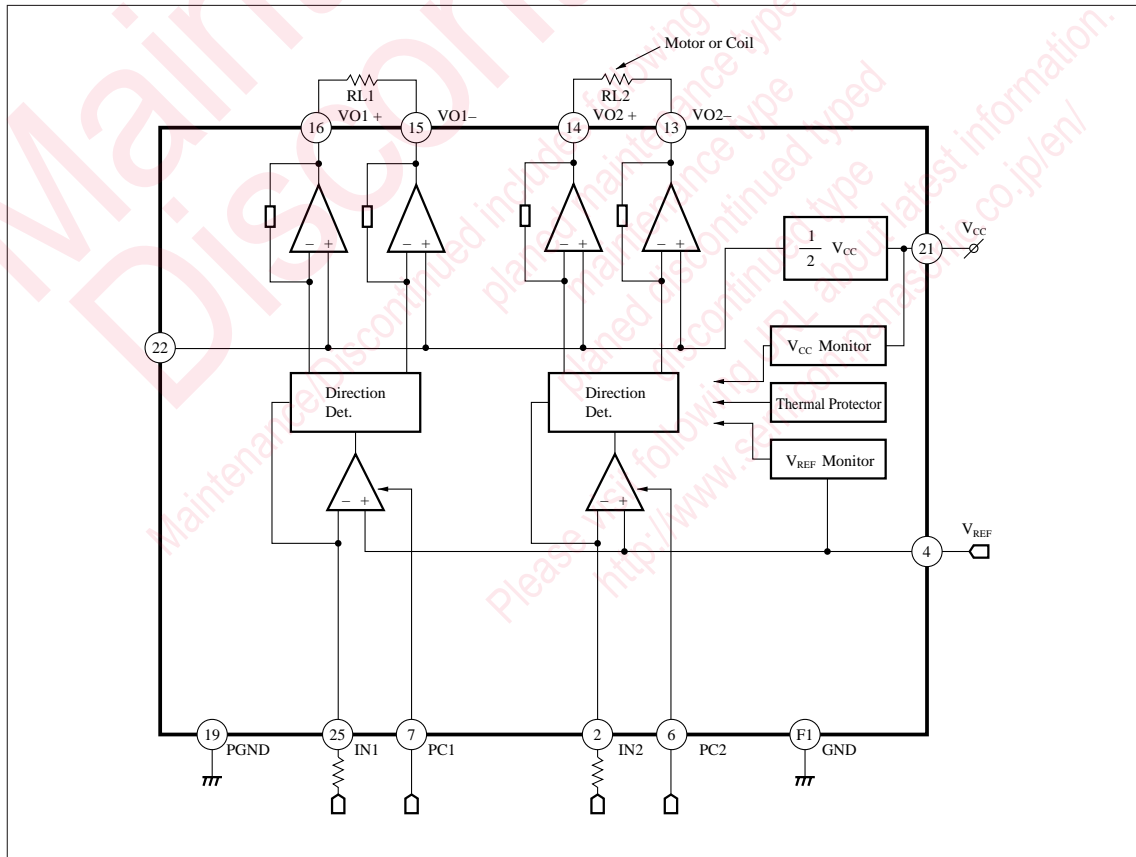
- Input/Output gain setting enabled by an external resistance
- 2ch. independently controllable PC (Power Cut) feature built-in
- Thermal shut down circuit (with hysteresis) built-in
- Relatively easy pattern design by separating and concentrating the input line and output line

■ Application

Actuator for CD/CD-ROM, motor driver



■ Block Diagram



■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Supply Voltage	V _{CC}	18	V
Supply Current	I _{CC}	—	mA
Power Dissipation ^{Note)}	P _D	3140	mW
Operating Ambient Temperature	T _{opr}	-30 ~ + 85	°C
Storage Temperature	T _{stg}	-55 ~ + 150	°C

Note) For surface mounting on 100 × 80 × 1.6 mm double face glass epoxy board.

■ Recommended Operating Range (Ta=25°C)

Parameter	Symbol	Range
Operating Supply Voltage Range	V _{CC}	4.5V ~ 14V

■ Electrical Characteristics (Ta=25°C±2°C)

Parameter	Symbol	Condition	min.	typ.	max.	Unit
Total Circuit Current	I _{tot}	V _{CC} = 8V	5	10	15	mA

Drivers 1 and 2

Input Offset Voltage	V _{IOF}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	-10	—	10	mV
Output Offset Voltage	V _{OOV}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	-50	—	50	mV
Gain	G	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	18	20	22	dB
Maximum Output Amplitude (+)	V _{L+}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	4.4	5.0	—	V
Maximum Output Amplitude (-)	V _{L-}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	—	-5.0	-4.4	V
Threshold H	V _{PCH}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	2.0	—	—	V
Threshold L	V _{PCL}	V _{CC} = 8V R _L = 8Ω, R _{IN} = 10kΩ	—	—	0.3	V

Reset Circuit

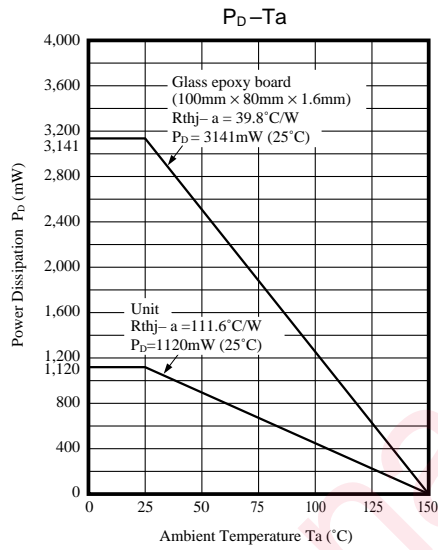
Reset Operation Release Supply Voltage	V _{RST}	I _{IN} = 10μA, R _{IN} = 10kΩ	3.0	3.2	3.3	V
V _{REF} Detection	V _{REF}		2.0	—	—	V

Heat Protection Circuit

Operation Temperature Equilibrium Value ^{Note 1)}	T _{THD}		(—)	(180)	(—)	°C
Operation Temperature Hysteresis Width ^{Note 1)}	ΔT _{THD}		(—)	(45)	(—)	°C

Note 1) Characteristic value in parentheses is a reference value for design but not a guaranteed value.

■ Characteristic Curve



■ Pin Name

Pin No.	Pin Name	Pin No.	Pin Name
1	NC	16	Normal Rotation Output Pin of Motor Driver 1
2	Input Pin of Motor Driver 2	17	NC
3	NC	18	NC
4	V _{REF} Input Pin	19	GND for Driver
5	NC	20	NC
6	PC (Power Cut) Input Pin 2	21	V _{CC}
7	PC (Power Cut) Input Pin 1	22	1/2 V _{CC} Output Pin
8	NC	23	NC
9	NC	24	NC
10	NC	25	Input Pin of Motor Driver 1
11	NC	26	NC
12	NC	27	NC
13	Reverse Rotation Output Pin of Motor Driver 2	28	NC
14	Normal Rotation Output Pin of Motor Driver 2	Fin	GND
15	Reverse Rotation Output Pin of Motor Driver 1	—	—

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