Dual Low Drop Out Regulator Ceramic Capacitor Available

BA3257FP/HFP

Description

BA3257FP/HFP is a power supply IC in which 2-output series regulators are incorporated into a power package (TO252-5/HRP-5). 2-outputs are 3.3V and a variable output.(Above 1.5V can be set.) Each current is 1A. Ceramic capacitor is available for output.

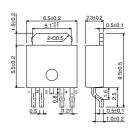
Features

- 1) 3.3V/1A and Variable(1.25V standard)/1A
- 2) Output ceramic capacitor available
- 3) Output voltage accuracy :+/-2%
- 4) Built-in over-current and thermal protection circuit
- 5) TO252-5 package and HRP-5 package

ApplicationsHDD/DVD

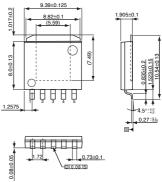
Dimension (Unit : mm)

BA3257FP



TO252-5

BA3257HFP



HRP-5

● Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit
Power supply voltage		Vcc	15	V
Power dissipation	HRP-5	Pd	2300 *1	mW
	TO252-5		1300 *2	
Operating temperature range		Topr	0 ~ +85	°C
Storage temperature range		Tstg	− 55 ~ + 150	°C

^{*1} Derating : 18.4mW/°C for operation above Ta=25°C PCB (70mmx70mm, t=1.6mm) glass epoxy mounting.
*2 Derating : 10.4mW/°C for operation above Ta=25°C PCB (70mmx70mm, t=1.6mm) glass epoxy mounting.

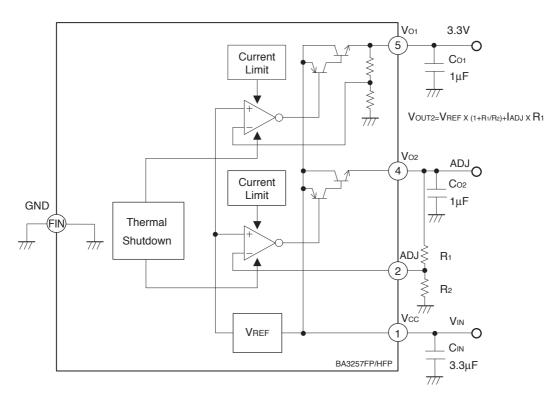
Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit
Power supply voltage	Vcc	4.75	_	14.0	V

● Electrical characteristics (Unless otherwise noted; Ta=25°C, Vcc=5V, R₁=R₂=5kΩ)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Circuit current	lb	-	3	5	mA	lo1=0mA, lo2=0mA
Line regulation 1,2	ΔVLINE1,2	_	5	15	mV	Vcc=4.75 → 14V, Io1=5mA
Load regulation 1,2	ΔV LOAD1,2	_	5	20	mV	lo2=5mA → 1A
[3.3V output]						
Output voltage	Vo1	3.234	3.300	3.366	V	lo1=50mA
Dropout voltage	Δ V D1	_	1.1	1.3	V	lo1=1A
Output current	lo1	1.0	-	_	Α	
[Variable output]						
Reference voltage	Vref	1.225	1.250	1.275	V	lo2=50mA
Dropout voltage	Δ V D2	_	1.1	1.3	V	lo2=1A, R1=8.2kΩ, R2=5kΩ
Output current	lo2	1.0	_	_	Α	

Application Circuit



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