## 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.

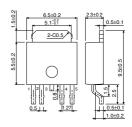
#### Features

- 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

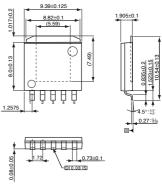
## Dimension (Unit : mm)

#### **BA3257FP**



TO252-5

#### BA3257HFP



HRP-5

## Absolute Maximum Ratings (Ta=25°C)

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

<sup>\*1</sup> 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.

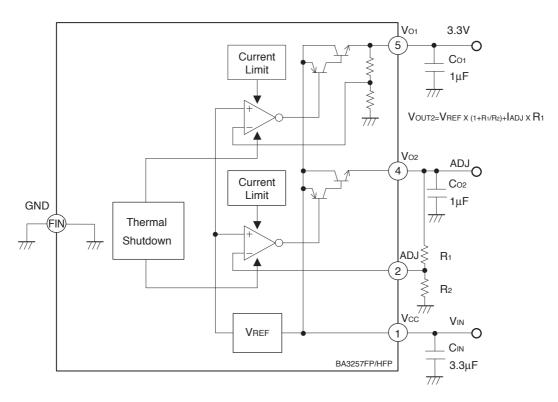
#### Recommended Operating Conditions (Ta=25°C)

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)

					i e	
Symbol	Min.	Тур.	Max.	Unit	Conditions	
lb	-	3	5	mA	lo1=0mA, lo2=0mA	
$\Delta V$ LINE1,2	_	5	15	mV	Vcc=4.75 → 14V, lo1=5mA	
$\Delta V$ LOAD1,2	-	5	20	mV	lo2=5mA → 1A	
[3.3V output]						
Vo1	3.234	3.300	3.366	V	lo1=50mA	
$\Delta V$ D1	_	1.1	1.3	V	lo1=1A	
lo1	1.0	_	_	Α		
[Variable output]						
Vref	1.225	1.250	1.275	V	lo2=50mA	
Δ <b>V</b> D2	_	1.1	1.3	V	lo2=1A, R1=8.2kΩ, R2=5kΩ	
lo2	1.0	-	_	Α		
	Ib ΔVLINE1,2 ΔVLOAD1,2  Vo1 ΔVD1 Io1  Vref ΔVD2	Ib – ΔVLINE1,2 – ΔVLOAD1,2 –  Vo1 3.234 ΔVD1 – Io1 1.0  Vref 1.225 ΔVD2 –	Ib - 3 ΔVLINE1,2 - 5 ΔVLOAD1,2 - 5 Vo1 3.234 3.300 ΔVD1 - 1.1 Io1 1.0 -  Vref 1.225 1.250 ΔVD2 - 1.1	Ib	Ib	

## Application Circuit



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