

Dual Low Drop Out Regulator

Ceramic Capacitor Available

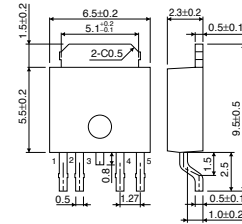
BA3257FP/HFP

● 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.

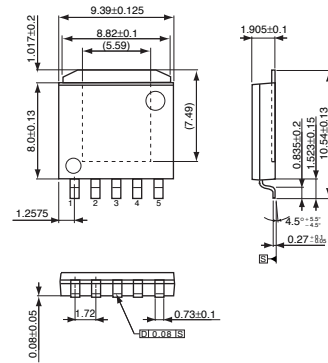
● Dimension (Unit : mm)

BA3257FP



TO252-5

BA3257HFP



HRP-5

● 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

● Applications

HDD/DVD

● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V _{CC}	15	V
Power dissipation	HRP-5	2300	mW
	TO252-5	1300	
Operating temperature range	T _{opr}	0 ~ +85	°C
Storage temperature range	T _{stg}	-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.	Typ.	Max.	Unit
Power supply voltage	V _{CC}	4.75	-	14.0	V

● Electrical characteristics (Unless otherwise noted; $T_a=25^\circ\text{C}$, $V_{CC}=5\text{V}$, $R_1=R_2=5\text{k}\Omega$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current	I_b	-	3□	5□	mA	$I_{o1}=0\text{mA}$, $I_{o2}=0\text{mA}$
Line regulation 1,2	$\Delta V_{LINE1,2}$	-	5□	15□	mV	$V_{CC}=4.75 \rightarrow 14\text{V}$, $I_{o1}=5\text{mA}$
Load regulation 1,2	$\Delta V_{LOAD1,2}$	-	5□	20□	mV	$I_{o2}=5\text{mA} \rightarrow 1\text{A}$
[3.3V output]						
Output voltage	V_{o1}	3.234	3.300□	3.366	V	$I_{o1}=50\text{mA}$
Dropout voltage	ΔV_{D1}	-	1.1□	1.3	V	$I_{o1}=1\text{A}$
Output current	I_{o1}	1.0	-□	-	A	
[Variable output]						
Reference voltage	V_{ref}	1.225	1.250	1.275□	V	$I_{o2}=50\text{mA}$
Dropout voltage	ΔV_{D2}	-	1.1□	1.3□	V	$I_{o2}=1\text{A}$, $R_1=8.2\text{k}\Omega$, $R_2=5\text{k}\Omega$
Output current	I_{o2}	1.0	-	-	A	

● Application Circuit

