

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

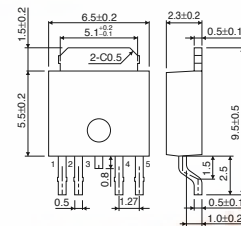
- 1) 3.3V/1A and Variable(1.25V standard)/1A
- 2) Output ceramic capacitor available
- 3) Output voltage accuracy $\pm 2\%$
- 4) Built-in over-current and thermal protection circuit
- 5) TO252-5 package and HRP-5 package

● Applications

HDD/DVD

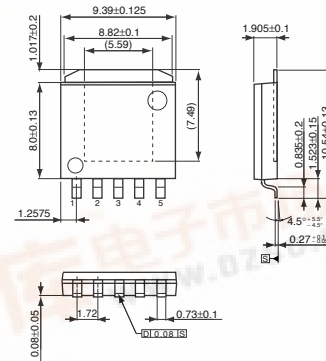
● Dimension (Unit : mm)

BA3257FP



TO252-5

BA3257HFP



HRP-5

● 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; Ta=25°C, Vcc=5V, R1=R2=5kΩ)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current	I _b	–	3□	5□	mA	I _{o1} =0mA, I _{o2} =0mA
Line regulation 1,2	ΔV _{LINE1,2}	–	5□	15□	mV	V _{cc} =4.75 → 14V, I _{o1} =5mA
Load regulation 1,2	ΔV _{LOAD1,2}	–	5□	20□	mV	I _{o2} =5mA → 1A
[3.3V output]						
Output voltage	V _{o1}	3.234	3.300□	3.366	V	I _{o1} =50mA
Dropout voltage	ΔV _{D1}	–	1.1□	1.3	V	I _{o1} =1A
Output current	I _{o1}	1.0	–□	–	A	
[Variable output]						
Reference voltage	V _{ref}	1.225	1.250	1.275□	V	I _{o2} =50mA
Dropout voltage	ΔV _{D2}	–	1.1□	1.3□	V	I _{o2} =1A, R1=8.2kΩ, R2=5kΩ
Output current	I _{o2}	1.0	–	–	A	

● Application Circuit

