

Dual Low Drop Out Regulator

Ceramic Capacitor Available

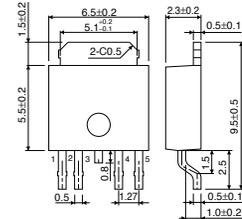
BA3258FP/HFP

● Description

BA3258FP/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 1.5V output. Each current is 1A. Ceramic capacitor is available for output.

● Dimension (Unit : mm)

BA3258FP

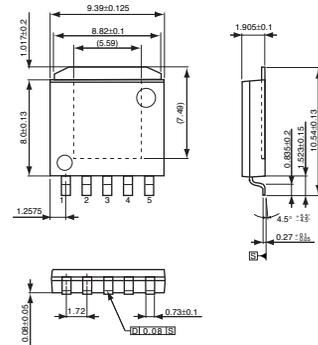


TO252-5

● Features

- 1) 3.3V/1A and 1.5V/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

BA3258HFP



HRP-5

● 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; $T_a=25^\circ\text{C}$, $V_{cc}=5\text{V}$)

| 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 | $V_{cc}=4.75 \rightarrow 14\text{V}$, $I_o=5\text{mA}$ |
| Load regulation 1,2 | $\Delta V_{LOAD1,2}$ | - | 5□ | 20□ | mV | $I_o=5\text{mA} \rightarrow 1\text{A}$ |
| [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 | |
| [1.5V output] | | | | | | |
| Output voltage | V_{o2} | 1.470 | 1.500□ | 1.530□ | V | $I_{o2}=50\text{mA}$ |
| Output current | I_{o2} | 1.0 | - | - | A | |

● Application Circuit

