

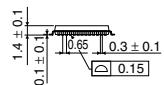
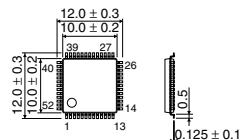
Signal processor LSI with pre-servo amplifier for CD players

BU9532KS2

● Description

BU9532KS2 is a digital signal processor LSI with built-in pre-servo amplifier developed for CD players. This built-in pre-servo amplifier is applied to the RW functions of the compact disc. Combining ROHM's BU24393 – a system micro controller with this new DSP BU9532KS2 provides an extremely simplified CD system.

● Dimension (Units : mm)



SQFP-T52

● Features

- 1) Built-in pre-servo amplifier for playing CD-RW
- 2) Tracking, Focus automatic control
- 3) Symmetry correction function
- 4) Built-in x8 over sampling filter + 1 bit DAC
- 5) Digital bass boost, soft mute function

● Applications

Portable CD players, CD radio cassette players

● Absolute Maximum Ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|-----------------------------|--------|-----------|------|
| Maximum applied voltage | Vcc | 4.5 | V |
| Power dissipation | Pd | 850 * | mW |
| Operating temperature range | Toopr | -25 ~ 75 | °C |
| Storage temperature range | Tstg | -55 ~ 125 | °C |

*Derating : 8.5mW/°C for operation above Ta=25°C

● Recommended Operating Conditions (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|--------------------------------|-----------------|------|------|------|------|
| Operating power supply voltage | V _{DD} | 2.5 | - | 3.3 | V |

● Electrical characteristics (Unless otherwise noted; Ta=25°C, Vcc=3.0V)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|------------------------------------|------------------|------|------|------|------|------------|
| Circuit current | I _o | - | 25 | 32 | mA | |
| Audio-DAC distortion | THD | - | 0.01 | - | % | 0dB,1KHz |
| Audio-DAC Dynamic range | DR | - | 90 | - | dB | -60dB,1KHz |
| Audio-DAC S/N rate | S/N | - | 96 | - | dB | |
| Servo-ADC Max. conversion voltage | V _{ADH} | 1.0 | 1.2 | 1.4 | V | |
| Servo-ADC Min. conversion voltage | V _{ADL} | -1.4 | -1.2 | -1.0 | V | |
| Servo-DAC Max. output voltage | V _{DAH} | 0.8 | 1.2 | - | V | |
| Servo-DAC Min. output voltage | V _{DAL} | - | -1.2 | -0.8 | V | |
| RF amplifier Max. output amplitude | V _{RFH} | 1.1 | 1.3 | - | V | |
| RF amplifier Min. output amplitude | V _{RFL} | - | -1.3 | -1.1 | V | |

● Block Diagram

