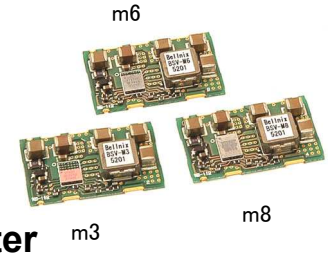
**SMD Correspondence, Able to drive the Latest LSI with High-Speed Load Response!**

RoHS Compliance | High Response T=160ns




# 3A/6A/8A BSV-m Series (m3, m6, m8)

## High-Speed Load Response, Step-Down DC-DC Converter

## Input: +3.0V to +5.5V Output: +3.3V (+1.0V to +3.3V)

**Voltage can be optionally set with external resistors. (Ex.: 1V, 1.2V, 1.3V, 1.5V, 1.8V, 2V, 2.5V)**

- Ultra Small Size 15×24mm
- Ultra Thin Type 4mm
- High-Speed Load Response
- Ultra High Efficiency
- Over-Current Protection
- External Capacitors Not Required
- Heat Sink Not Required
- Non-Isolated Type Converter
- Under Voltage Lock Out
- Remote ON/ OFF Control
- Adjustable Output Voltage
- Surface Mount Package (SMD)
- Simple Structure and High Heat Release
- Operating Temp Range -40°C to +85°C (Temp Derating Required)
- RoHS Compliance

| Models BSV-m Series | Input V Vdc | Output V Vdc | Output I A | Line Reg. %(typ.) | Load Reg. %(typ.) | Ripple Noise mVpp(typ.) | Efficiency %(typ.) |
|---|---|---|---|---|---|---|---|
| **BSV-3.3S3R0M** | 3.0-5.5 | 3.3 (1.0 to 3.3) | 0-3 | 0.5 | 1.0 | 30 | 96 |
| **BSV-3.3S6R0M** | | | 0-6 | | | 50 | 94 |
| **BSV-3.3S8R0M** | | | 0-8 | | | 50 | 96 |

Note 1: When adjusting the output voltage, the input and output voltage difference needs to be 0.5V or more.
Vin(V)-Vo(V)≧0.5V

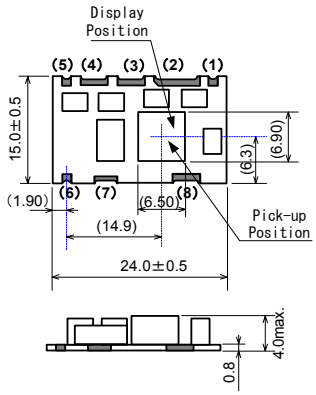
Note 2: Ripple noise, efficiency value is at Vin=5V, Vo=3.3V and Io=max.

Note 3: Ripple noise is measured at 20MHz bandwidth.

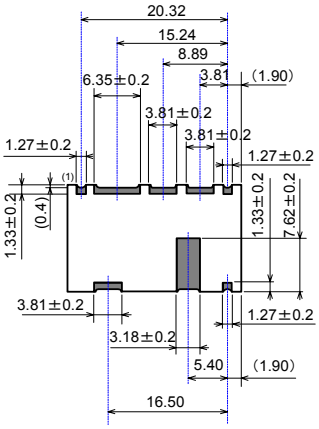
Note 4: Depending on conditions, air flow cooling maybe required.

<Outline>

Top View



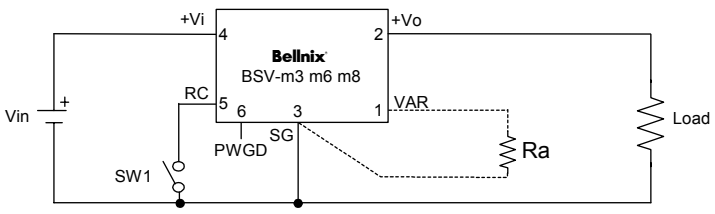

Bottom View




| Pin | Function |
|---|---|
| 1 | VAR |
| 2 | +Vo |
| 3 | SG |
| 4 | +Vi |
| 5 | RC |
| 6 | PWGD |
| 7 | HS |
| 8 | NC |

Units: mm
Weight: 2.7g typ.
Tolerances unless otherwise specified : ±0.5

<Standard Connection Diagram>




- SW1: Output goes OFF when short.
- VAR: Rated output voltage applies when open.
- Ra: When adjusting the output voltage, connect Ra between VAR pin and SG pin.

- Note!
This catalogue is an outline of the products. When designing, be sure to refer to the data sheets.