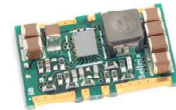
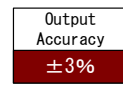
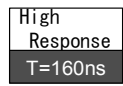


Bellnix® High-Speed Load Response, Non-Isolated Type POL DC-DC Converter

Ultra Small Size, Able to drive the Latest Digital LSI
with High-Speed Load Response!

12A BSV-H Series



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

Input: +3.0V to +5.5V Output: +1.5V (+0.6V to 1.5V), +3.3V (+0.8V to 3.3V)

Voltage can be optionally set with external resistors. (Ex: 0.8V, 1V, 1.2V, 1.5V, 1.8V, 2V, 2.5V, 3.3V)

- Ultra Small Size 16.5×27mm
- Ultra Thin Type 4.2mm
- High-Speed Load Response
- Ultra High Efficiency
- Over-Current Protection
- External Capacitors Not Required
- Heat Sink Not Required
- Non-Isolated Type
- Under Voltage Lock Out
- Remote ON/OFF Control
- Adjustable Output Voltage
- Surface Mount Package (SMD)
- Operating Temp Range
-40°C to +85°C
(Temp Derating Required)
- RoHS Compliance

Models BSV-H Series	Input V Vdc	Output V Vdc	Output I A	Line Reg. %(typ.)	Load Reg. %(typ.)	Ripple Noise mVpp(typ.)	Efficiency %(typ.)
BSV-3.3S12R0H	3.0-5.5	3.3 ^{note 1} (0.8-3.3)	0-12	0.5	1.0	30	93

Note 1: The input and output voltage difference must be greater than 0.5V.

$$V_{in}(V) - V_o(V) \geq 0.5V$$

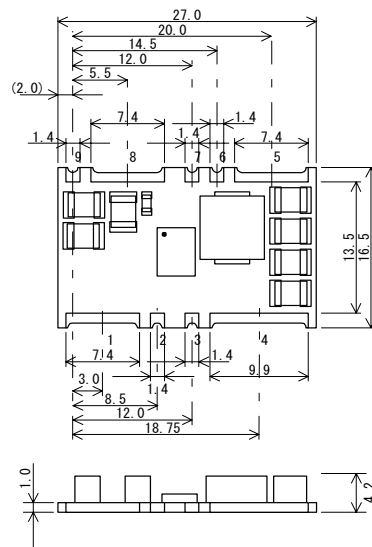
Note 2: Ripple noise, efficiency value is when input voltage is at 5V, output voltage is 3.3V and the rated output applies.

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

adding a multilayer ceramic capacitor with 47μF for input and 4.7μF for output.

Note 4: Depending on the ambient temp. conditions, air flow cooling may be required.

<Outline>



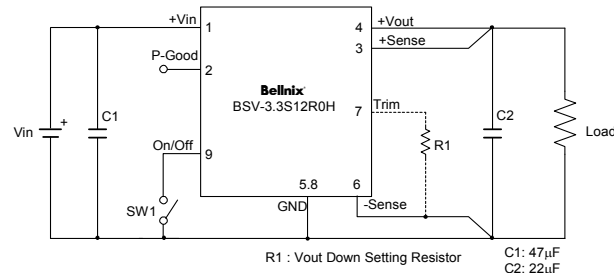
Pin	Function
1	+Vin
2	P-Good
3	+Sense
4	+Vout
5	GND
6	-Sense
7	Trim
8	GND
9	On/Off

Weight: 3.1g typ.

Units: mm

Tolerances unless otherwise specified : ±0.5

<Standard Connection Diagram>



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

- SW1: Output turns off when short.
- Trim: When open, the rated output voltage applies.
- R1: When adjusting the output voltage, connect R1 between Trim pin and -Sense pin.