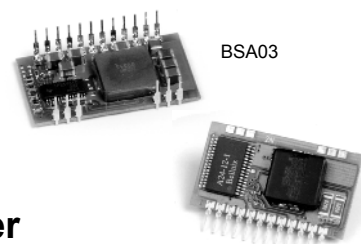


Bellnix® High Efficiency, Ultra Small Size, Non-Isolated Type POL DC-DC Converter

Achieved high efficiency at a low price !

1A/2.2A/6A BSA Series



High Efficiency, Low Price Step-Down DC-DC Converter

Input: +3.3V, +5V

Input: +12V, +15V, +24V

Input: +24V

Output: +1.8V (+1.0V to +3.3V)

Output: +3.3V (+3V to +5V)

Output: +12V (+9V to +12V)

- High Efficiency (82%-91%)

- Ultra Small Size

- Adopted Original MCM

- MTBF 1,000,000Hrs

- Low Price

- Simple Structure

- Over-Heat Protection

- Over-Current Protection

- Easy to Use SIP, DIP Type

- Adjustable Output Voltage

- Non-Isolated Type Converter

- Heat Sink Not Required

- Long Life, High Reliability

- Operating Temp Range

-20°C to +70°C

(Temp Derating Required)

BSA24 series

- Operating Temp Range

-30°C to +85°C

(-30°C to -20°C :

Startup guaranteed)

(Temp Derating Required)

BSA03 series

- RoHS Compliance

Models BSA Series	Input V Vdc	Output V Vdc	Output I A	Line Reg %(typ.)	Load Reg %(typ.)	Ripple/Noise mVpp(typ.)	Efficiency %(typ.)
BSA03-1.8S6R0	3.3	1.8	0-6	1	1	30	86
BSA03-1.8S6R0-D	(3-5.5)	(1-3.3)					
BSA24-3.3S2R2	24	3.3	0-1.8	1.5	1	50	82
BSA24-3.3S2R2-D	(9-36)	(3-5)	(0-2.2)				
BSA24-12S1R0	24	12	0-0.75	1.5	1	100	91
BSA24-12S1R0-D	(18-36)	(9-12)	(0-1)				

Note 1: For DIP type add a suffix "D".

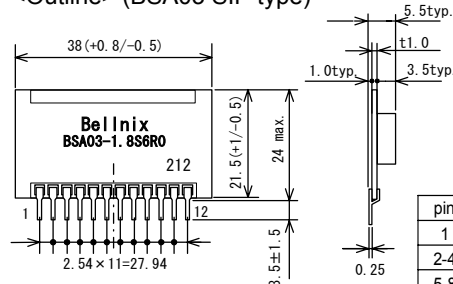
Note 2: External capacitors are required.

Note 3: The output voltage inside the () indicates the adjustable range.

Note 4: The output current inside the () indicates the value with air flow cooling.

Note 5: The BSA03 has requirements for input/ output voltage differences. Depending on conditions, air flow cooling maybe required.

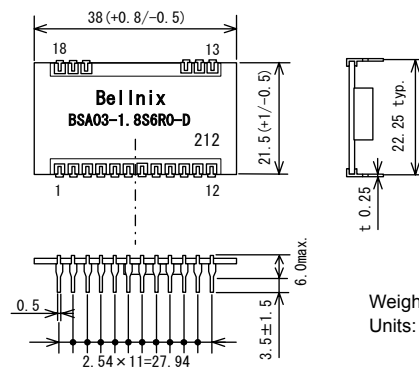
<Outline> (BSA03 SIP type)



pin	Function
1	ON/OFF
2-4	+Vin
5-8	GND
9-11	+Vout
12	V.adj
13-18	NC

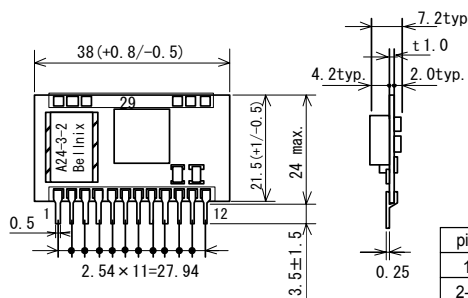
Weight: 9g typ.
Units: mm

(BSA03 DIP type)



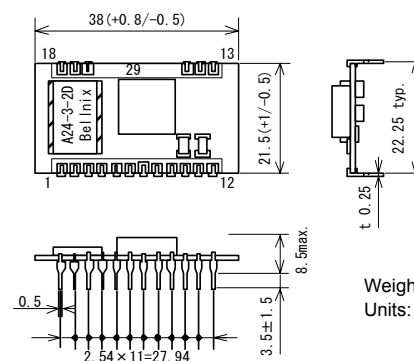
Weight: 9g typ.
Units: mm

(BSA24 SIP type)



Weight: 7g typ.
Units: mm

(BSA24 DIP type)



Weight: 7g typ.
Units: mm

- Note!

This catalogue is an outline of the products.

When designing, be sure to refer to the data sheets.