NEW Bellnix RoHS Compliance

Minimal derating in this size !

3A/6A/10A BST-M (SIP) Series

Low Cost, DOSA Compatible, POL DC-DC Converter

Input: +2.4V to +5.5V Output: +0.7525V (+0.7525V to +3.63V)
Input: +6.0V to +14.0V Output: +0.7525V (+0.7525V to +5.5V)

- Remote ON/OFF Control
- Industry Standard Package
- High Efficiency
- Adjustable Output Voltage
- Over Current Protection
- Under Voltage Lock Out
- Operating Temp
  -40°C to +85°C
- Minimal Derating at
  surrounding temp 85°C
- Non-Isolated Converter
- RoHS Compliance
- DOSA Compatible

Voltage can be optionally set with an external resistors (ex. 1V, 1.2V, 1.5V, 1.8V, 2.5V, 3.3V, 5V)

Models BST-M (SMD) Series	Input V Vdc	Output V Vdc	Output I A	Line Reg. %(typ.)	Load Reg. %(typ.)	Ripple Noise mVpp(typ.)	Efficiency %(typ.)
BST04M-0.7S06PDS	2.4 to 5.5	0.7525 (0.7525 to 3.63)	0 to 6	0.6	1.0	20	94.5
BST04M-0.7S10PDS			0 to 10			25	94.0
BST12M-0.7S03PDS	6.0 to 14.0	0.7525 (0.7525 to 5.5)	0 to 3	0.2	0.6	15	94.0
BST12M-0.7S06PDS			0 to 6	TBD	TBD	TBD	TBD
BST12M-0.7S10PDS			0 to 10	0.2	0.8	55	91.5

*Note 1: Output voltage inside the ( ) indicates the adjustable range.

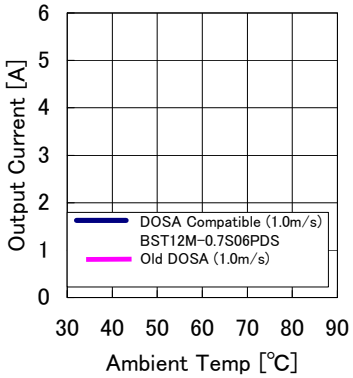
*Note 2: Input/output voltage requires voltage difference.
BST04M : Vout≦1.8V, Vin=2.4 to 5.5V
1.8V<Vout≦2.5V, Vin=3.3 to 5.5V
Vout>2.5V, Vin=4.5 to 5.5V
BST12M : Vout≦3.8V, Vin=6 to 14V
Vout>3.8V, Vin=8 to 14V

*Note 3: Ripple noise and efficiency values are when they are under the following conditions.
BST04M : Input voltage 5V, output voltage 3.3V, the rated load.
BST12M : Input voltage 12V, output voltage 5V, the rated load.

*Note 4: Ripple noise is measured by 20MHz bandwidth, with the following ceramic capacitors.
BST04M : 47μF×4 at input
: 47μF×2+1μF at output
BST12M : 47μF×2 at input
: 47μF×2+1μF at output

*Note 5: Depending on the ambient temp condition, cooling air flow may be required.

<Derating Curve>



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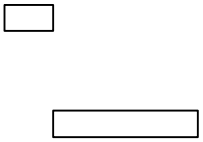

Weight : 2.3g typ.
Units : mm

<Standard Connection Diagram>

- SW : When short, the output will switch off.
- Trim : When open, the output voltage is 0.7525V.
- When adjusting the output voltage, connect RTrim between Trim pin and GND.

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