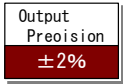
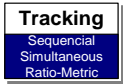


# Bellnix Tracking Function, Non-Isolated Type POL DC-DC Converter



World Standard Size!

## 6A/10A/16A BST Series



### Low Price, Tracking Function, Step Down DC-DC Converter

**Input: +2.8 to +5.5V    Output: +0.75V/+0.75 to +3.3V**  
**Input: +10 to 14V        Output: +0.75V/+0.75 to +5.0V**

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

- Tracking Function
- Sequential Operation
- Simultaneous Tracking Operation
- Ratio-Metric Tracking Operation
- Remote ON/ OFF Control
- Industry's Standard Package
- Surface Mount Package (SMD)
- Ultra High Efficiency
- Adjustable Output Voltage
- Over-Current Protection
- No Electrolytic Capacitor, No Tantalum Capacitor
- Operating Temp Range -40°C to +85°C (Temp Derating Required)
- RoHS Compliance
- DOSA Compatible

Models	Input V	Output V	Output I	Line Reg.	Load Reg.	Ripple Noise	Efficiency
BST Series	Vdc	Vdc	A	%(typ.)	%(typ.)	mVpp(typ.)	%(typ.)
BST04-0.7S06PCM	2.8-5.5	0.75-3.3	6	0.3	0.4	40	94
BST12-0.7S06PCM	10-14	0.75-5.0		0.2		30	91.5
BST04-0.7S10PCM	2.8-5.5	0.75-3.3	10	0.3	0.4	25	96
BST12-0.7S10PCM	10-14	0.75-5.0		0.3		30	94.5
BST04-0.7S16PCM	2.8-5.5	0.75-3.3	16	0.3	0.4	25	95
BST12-0.7S16PCM	10-14	0.75-5.0		0.3		30	93.5

Note 1: When the output voltage is not adjusted, the rated output voltage is  $V_o=0.75V$ .

Note 2: When adjusting the  $V_{out}$ , the input and output voltage difference must be greater than 0.5V.

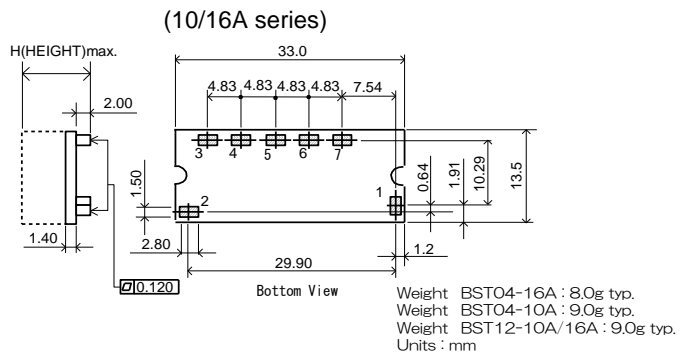
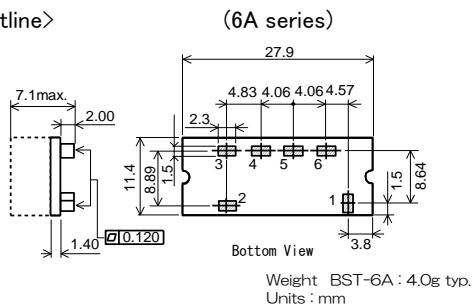
$$V_{in}(V) - V_o(V) \geq 0.5V$$

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

Note 4: Efficiency is when BST04 series is at:  $V_{in}=5V, V_o=3.3V$  and BST12 series is at:  $V_{in}=12V, V_o=5V$  respectively.

Note 5: Depending on the ambient temp conditions, air flow cooling is required.

<Outline>



- Note!

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

Pin	Function
1	On/Off
2	$V_{in}$
3	Seq
4	Gnd
5	Trim
6	$V_{out}$

Pin no. is not shown on the converter.

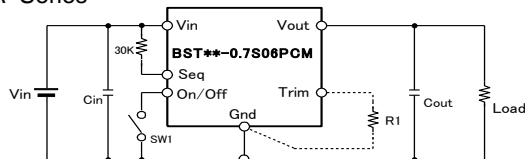
Model	H(Height)
BST04	8.3
BST12	9.7

Pin	Function
1	On/Off
2	$V_{in}$
3	Seq
4	Gnd
5	$V_{out}$
6	Trim
7	Sense

Pin no. is not shown on the converter.

### <Standard Connection Diagram>

#### BST-6A Series

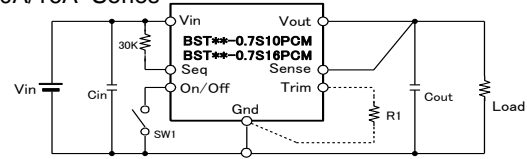


$C_{in}$ : BST04=47 $\mu$ F Ceramic capacitor//2x100 $\mu$ F Tantalum capacitor  
 BST12=2x22 $\mu$ F Ceramic capacitor

$C_{out}$ : 1 $\mu$ F Ceramic capacitor//10 $\mu$ F Tantalum capacitor  
 (Common for BST04 and 12)

R1:  $V_{out}$  up Resistor

#### BST-10A/16A Series



$C_{in}$ : BST04=47 $\mu$ F Ceramic capacitor//2x100 $\mu$ F Tantalum capacitor  
 (Common for 10A and 16A series)

BST12 (10A series)=4x22 $\mu$ F Ceramic capacitor  
 BST12 (16A series)=6x22 $\mu$ F Ceramic capacitor

$C_{out}$ : 1 $\mu$ F Ceramic capacitor//10 $\mu$ F Tantalum capacitor  
 (Common for BST04 and 12)

R1 :  $V_{out}$  up Resistor