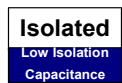




Wide Input Voltage Range, Save Mounting Space !
6 Watt BTC Series



The Fifth Generation, Ultra Small Size, Isolated Type DC-DC Converter

Input: 5V, 12V, 24V, 48V

Output: 3.3V, 5V, 12V, 15V, ±12V, ±15V

- Adjustable Output Voltage
- Remote ON/OFF Control
- Dual Power Supply Usable As Single Power Supply
- Isolation Voltage AC500V
- Over-Current Protection
- Under Voltage Lock Out
- Over Input Current Protection Element
- No Electrolytic Capacitor, No Tantalum Capacitor
- MTTF 2,000,000Hrs
- Metallic Shield Cover
- Halogen-Free PCB Used
- Between Primary and Secondary isolation capacitance is approx. 30-110pF
- Operating Temp Range -40°C to +85°C (Temp Derating Required)
- RoHS Compliance
- UL/C-UL Recognition

Models BTC Series	Input V Vdc	Output V Vdc	Output I mA	Line Reg. %(max.)	Load Reg. %(max.)	Ripple Noise mVpp(typ.)	Efficiency %(typ.)
BTC05-03S120X	4.5-9	3.3	0-1200	0.6	1.2	40	76
BTC05-05S100X		5	0-1000	0.4	0.8		79
BTC05-12S50X		12(15)	0-500(400)	0.35	0.85	30	82
BTC05-12W25X		±12(±15)	0-250(200)	0.7	5		82
BTC12-03S120X	9-18	3.3	0-1200	0.6	1.2	40	78
BTC12-05S120X		5	0-1200	0.4	0.8		82
BTC12-12S50X		12(15)	0-500(400)	0.35	0.85	30	85
BTC12-12W25X		±12(±15)	0-250(200)	0.7	5		85
BTC24-03S120X	18-36	3.3	0-1200	0.6	1.2	40	77
BTC24-05S120X		5	0-1200	0.4	0.8		81
BTC24-12S50X		12(15)	0-500(400)	0.35	0.85	30	87
BTC24-12W25X		±12(±15)	0-250(200)	0.7	5		86
BTC48-03S120 X	36-76	3.3	0-1200	0.6	1.2	40	77
BTC48-05S120X		5	0-1200	0.4	0.8		81
BTC48-12S50X		12(15)	0-500(400)	0.35	0.85	30	86
BTC48-12W25X		±12(±15)	0-250(200)	0.7	5		86

Note 1: Specify the type in the X column of the model name. D : DIP type, S : SMD type

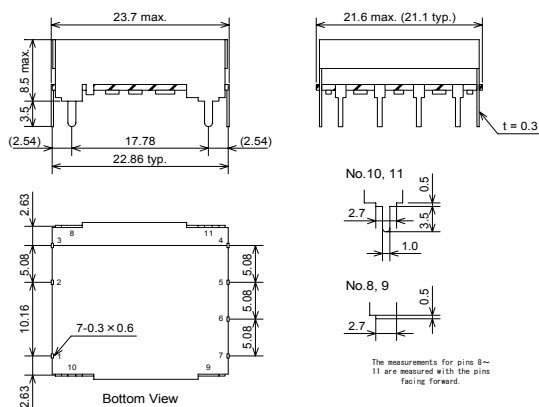
Ex.) DIP type: BTC05-03S120D, SMD type: BTC05-03S120S

Note 2: The output voltage inside () is when Vadj. and -Vout is short. The range of output voltage is as follows: 3.15-3.6V (3.3V products), 4.75-6V (5V products), 11.4-15V (12V products) respectively.

Note 3: The output current inside () is when output voltage is set at maximum.

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

<Outline> (DIP type)



BTC-S Series

Pin	Function
1	+Vin
2	ON/OFF
3	-Vin
4	NC
5	-Vout
6	Vadj
7	+Vout
8, 9	Stand Off
10,11	Case Connection

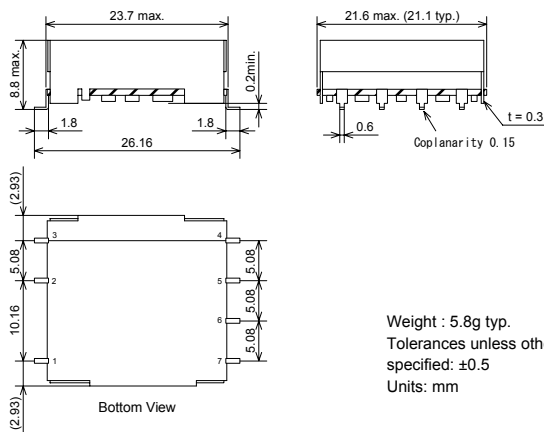
*8-11pin are only available for DIP type.

BTC-W Series

Pin	Function
1	+Vin
2	ON/OFF
3	-Vin
4	-Vout
5	Common
6	Vadj
7	+Vout
8, 9	Stand Off
10,11	Case Connection

*8-11pin are only available for DIP type.

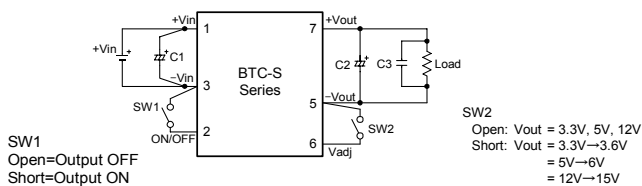
<Outline> (SMD type)



Weight : 5.8g typ.
 Tolerances unless otherwise specified: ±0.5
 Units: mm

<Standard Connection Diagram>

BTC-S Series (3.3V,5V,12V,15V)

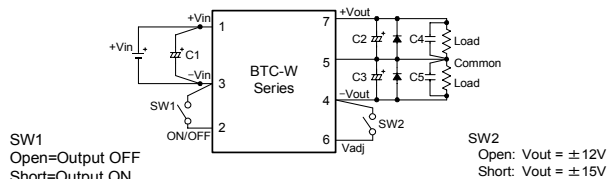


C1=22 μF / C2=22 μF / C3=0.47 μF

- This product has limit to the capacity of external capacitor. Please refer to data sheets.

- The Rated output voltage applies when 6pin is open. Output voltage is adjustable as shown above with Vadj and -Vout short.

BTC-W Series (±12V,±15V)



C1=22 μF / C2,C3=22 μF / C4,C5=0.47 μF

SW1 Open=Output OFF
Short=Output ON

SW2 Open: Vout = ±12V
Short: Vout = ±15V