

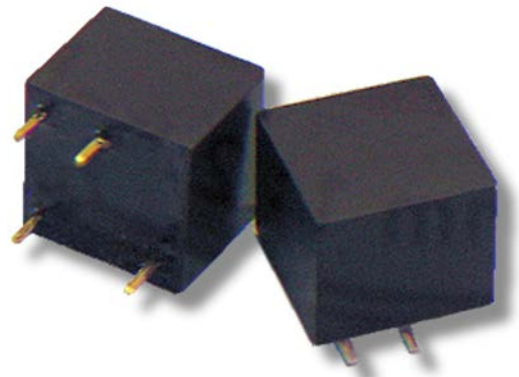


BEAR
POWER SUPPLIES

BPS Series DC/DC Converters

High-voltage isolated 1.5 W converters have high efficiency for powering PIN diodes, APDs, piezoelectric devices and more

- Ultra-miniature size
- 90% efficiency
- Superior load regulation
- Wide operating temperature -55°C to +85°C
- No heat sink or electrical derating required
- 1.5 W output @ 85°C ambient
- Excellent input-output isolation



High reliability and efficiency in a low-profile package

BPS Series high-voltage DC-DC converters feature up to five times better efficiency and ten times better load regulation than similar products on the market.

These high-reliability isolated converters operate from -55°C to +85°C with no heat sink or electrical derating required.

Use these miniature, low-profile converters in RF transceivers, programmable filters and industrial or scientific instruments.

BPS Series converters have a single input voltage (configurable from 3 VDC to 15 VDC) and a single output voltage (configurable from 50 VDC to 300 VDC). They are unregulated; output voltage is directly proportional to input voltage.

Typical characteristics for standard DC/DC converters

at 25°C ambient and input voltage at nominal value unless noted

BPS Series	
Models	BPS0xxyyy – SMT package BPS1xxyyy – thru-hole package (xx=input voltage, yyy=output voltage)
Input voltage (VDC)	3 to 15 VDC (Single input, factory configurable)
Output voltage (VDC)	50 to 300 VDC (Single output, factory configurable)
Line regulation	Unregulated / output directly proportional to input
Load regulation	3% Δ from no load to full load
Efficiency	90% typical
Input voltage range	± 10% of configured input voltage
Output voltage tolerance at full load (nominal)	Input ± 3% (<i>tighter tolerance available, please call</i>)
Input-output isolation	100 MΩ minimum at 1000 VDC
Output temperature coefficient	0.02% per °C
Operating temperature	-55 to +85°C ambient (<i>no heat sink required</i>)
Storage temperature	-55 to +125°C
Dimensions	0.5 x 0.5 x 0.4 inches (12.7 x 12.7 x 10.2 mm)

The ultra-miniature encapsulated package is only 0.4" (10.2 mm) tall, with a total size of 0.1 cubic inches and weight of just 4 grams. It is available in both thru-hole and SMT versions. For drawings please call or visit our website.