

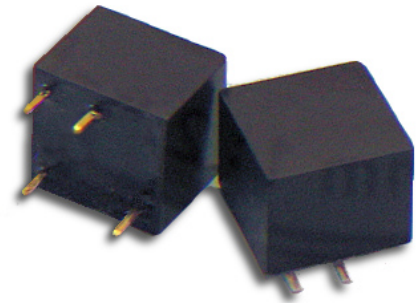


**BEAR**  
POWER SUPPLIES

**BPS SERIES HIGH RELIABILITY**

**Ultra-miniature, low profile isolated DC-DC converters**

Configurable 1.5W converters for powering PIN diodes, APDs, piezoelectric devices and more



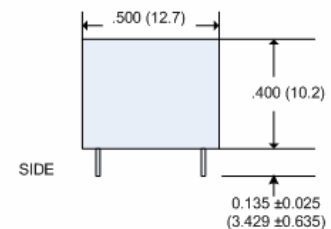
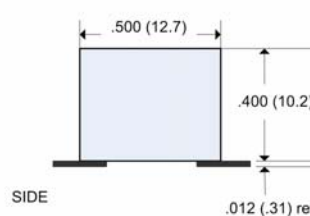
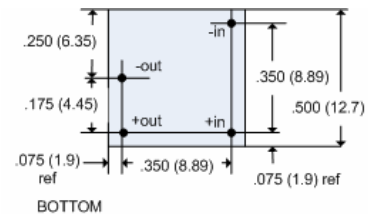
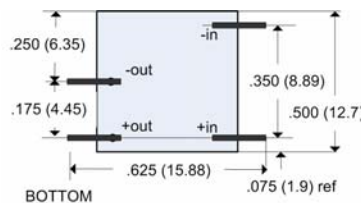
Use in RF transceivers ■ programmable filters  
■ industrial and scientific instruments

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.

The ultra-miniature encapsulated package is only 0.4" (10.2 mm) tall, with a total 0.1 cubic inches and weight of just 4 grams. Both thru-hole and SMT versions are available. 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.

**Features**

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



**PN BPS0xxxxx\* SMT**

**PN BPS1xxxxx\* Thru-Hole**

Typical characteristics at 25°C ambient and input voltage at nominal value unless noted	
Input voltage (xx)*	Single input, factory configurable from 3 to 15 VDC
Output voltage (yyy)*	Single output, factory configurable from 50 to 300 VDC
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 specified input voltage
Output voltage tolerance at full load (nom)	Input ±3% ■ Tighter tolerance available; please consult factory
Input/output isolation	100 MΩ min. @ 1000 VDC
Output temperature coefficient	0.02%/°C for all models
Operating temperature	-55°C to +85°C ambient ■ No heat sink required
Storage temperature	-55°C to +125°C
Dimensions	0.5 x 0.5 x 0.4 inches (12.7 x 12.7 x 10.2 mm)

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