



FEATURES

- ◆ Industry Standard Pin out
- ◆ 1kVDC Isolation
- ◆ UL94V-0 Package Material
- ◆ Optional Continuous Short Circuit Protected
- ◆ Fully Encapsulated
- ◆ Custom Solutions Available
- ◆ Efficiency to 87%
- ◆ 3 year Warranty

MODEL SELECTION

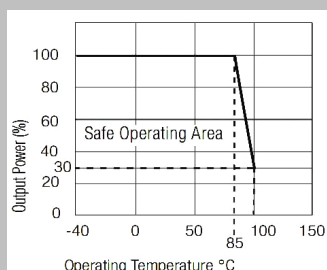
B^①05^②05^③X^④S^⑤-W5^⑥

- ① Product Series
- ② Input Voltage
- ③ Output Voltage
- ④ Fixed Input
- ⑤ SIP Package
- ⑥ Rated Power

APPLICATIONS

The B-XS-W5 DC/DC converters are typically used in general purpose low power isolation and voltage matching applications, and feature a full industrial operating temperature range of -40°C ~ +85°C without derating.

Derating-Graph(Ambient Temperature)



SELECTION GUIDE

Model	Input Voltage (V)	Output Voltage (V)	Output Current (MA)	Efficiency (%)	Max. Capacitive Load
B0505XS-W5	5	5	100	80	470µF
B1205XS-W5	12	5	100	82	470µF
B0512XS-W5	5	12	42	83	150µF
B1212XS-W5	12	12	42	86	150µF
B0515XS-W5	5	15	33	84	150µF
B1215XS-W5	12	15	33	87	150µF

add "P" for Continuous Short Circuit Protection, e.g.: B0505XS-W5P

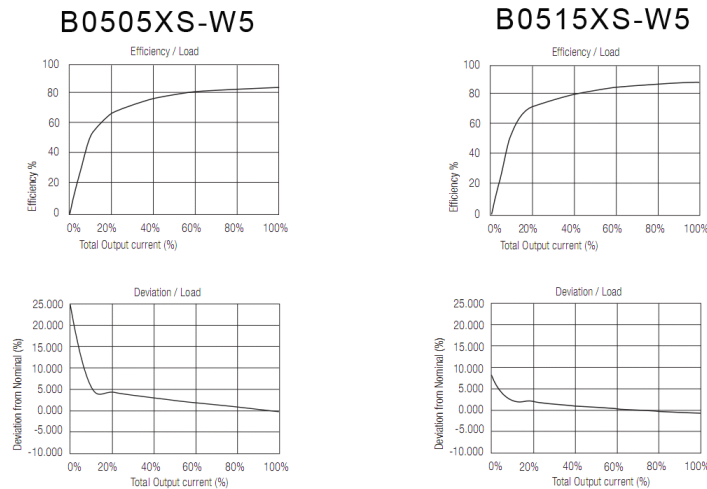
Specifications

Input Voltage Range		±10%
Output Voltage Accuracy		±5%
Line Voltage Regulation		1.2%/1% of Vin typ..
Load Voltage Regulation (10% to 100% full load)		10% max. / 4% typ..
Output Ripple and Noise (20MHz limited)		100mVp-p max.
Operating Frequency		20kHz min. / 54kHz typ.
Efficiency at Full Load		70% min. / 85% typ.
Efficiency at 50%I Load		65% min. / 80% typ.
Minimum Load = 0%		Specifications valid for 10% minimum load only.
Isolation Voltage	(tested for 1 second)	1000VDC
	(rated for 1 minute)	500VAC / 60Hz
Isolation Capacitance		20pF min. / 75pF max.
Isolation Resistance		10 GΩmin.
Short Circuit Protection		1 Second
Suffix "P"		Continuous
Operating Temperature Range (free air convection)		-40°C to +85°C (see Graph)
Storage Temperature Range		-55°C to +125°C
Relative Humidity		95% RH
Package Weight		1.4g
Packing Quantity		42 pcs per Tube
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F 985 x 10 ³ hours
(+85°C)		using MIL-HDBK 217F 200 x 10 ³ hours

(measured at T_A= 25°C, nominal input voltage, full load and after warm-up)

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Typical Characteristics



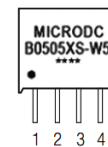
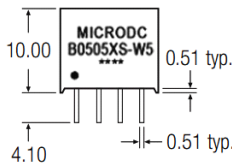
Notes

Note 1 Maximum capacitive load is defined as the capacitive load that will allow start up in under 1 second without damage to the converter .

Certifications IEC62321:2008 BSTDG13061091RC-4 E0611042E-1

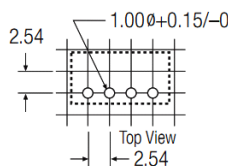
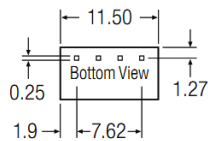
Package Style and Pinning (mm)

4 PIN SIP Package



3rd angle projection

Recommended Footprint Details



Pin Connections

Pin #	Single
1	-Vin
2	+Vin
3	-Vout
4	+Vout
XX.X	± 0.5 mm
XX.XX	± 0.25 mm



RoHS COMPLIANT INFORMATION

This series is compatible with RoHS soldering systems with a peak wave solder temperature of 300°C for 10 seconds. The pin termination finish on the SIP package type is Tin Plate, Hot Dipped over Matte Tin with Nickel Preplate. The DIP types are Matte Tin over Nickel Preplate. Both types in this series are backward compatible with Sn/Pb soldering systems.



REACH COMPLIANT INFORMATION

This series has proven that this product does not contain harmful chemicals, it also has harmful chemical substances through the registration, inspection and approval.