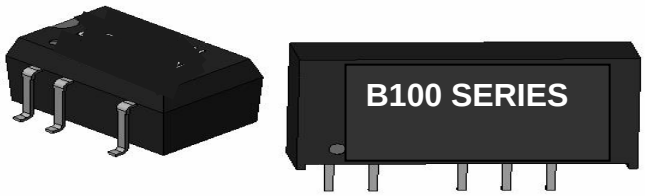
Intronics Power Inc.
1400 PROVINDENCE HIGHWAY • BUILDING 2 SUITE 2400
NORWOOD, MASSACHUSETTS 02062-5015 USA
www.intronicspower.com

B100 SERIES
1WATT
DC-DC CONVERTERS

FEATURE

* Industry Standard SIP and SMD Packages
* Efficiency up to 82%
* 1000VDC Isolation
* Low Cost
* Unregulated Outputs
* Low Ripple and Noise



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		%	CASE
				NO LOAD	FULL LOAD	EFF.	
B101	5 VDC	5 VDC	200 mA	40 mA	250mA	80	Miniature
B102	5 VDC	12 VDC	84 mA	40 mA	252mA	80	Miniature
B103	5 VDC	15 VDC	67 mA	40 mA	250mA	80	Miniature
B108	5 VDC	±12 VDC	42 mA	40 mA	255mA	79	Miniature
B109	5 VDC	±15 VDC	33 mA	40 mA	251mA	79	Miniature
B107	5 VDC	±5 VDC	100 mA	40 mA	267mA	75	Miniature
B111	12 VDC	5 VDC	200 mA	15 mA	103mA	81	Miniature
B112	12 VDC	12 VDC	84 mA	15 mA	102mA	82	Miniature
B113	12 VDC	15 VDC	67 mA	15 mA	102mA	82	Miniature
B118	12 VDC	±12 VDC	42 mA	15 mA	104mA	81	Miniature
B119	12 VDC	±15 VDC	33 mA	15 mA	101mA	82	Miniature
B117	12 VDC	±5 VDC	100 mA	15 mA	107mA	78	Miniature

NOTE : 1. Nominal Input Voltage 5 or 12 VDC

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25℃ Unless Otherwise Noted

INPUT SPECIFICATIONS :

Input Voltage Range.....10%

Input Filter .....Capacitive

OUTPUT SPECIFICATIONS :

Voltage Accuracy.....±3.0% max.

Ripple and Noise, 20MHz BW....SIP Models.....75mV p-p max.
SMD Models.....120mV p-p max.

Temperature Coefficient.....±0.05%/C max.
Short Circuit Protection.....Momentary 1sec. max.

Line Regulation, Note1.....±1.2% max.

Load Regulation, Note2.....±10% max.

GENERAL SPECIFICATIONS :

Efficiency.....See Table
Isolation Voltage.....1000 VDC min.
Isolation Resistance .....10^9 Ohms min.
Switching Frequency .....100KHz typ.

Operating Ambient Temperature Range..... -40℃ to +85℃

De-rating, Above 85℃ ..... Linearly to Zero power at 100℃

Case temperature (Note5).....+100℃ max.
Cooling.....Natural Convection

Storage Temperature Range ..... -55℃ to +125℃
Dimensions:

SIP Models.....0.77 x 0.24 x 0.40inches(19.5 x 6.1 x 10.2mm)
SMD Models(Single).....0.5 x 0.31 x 0.27inches(12.7 x 8.0 x 6.8mm)
SMD Models(Dual).... 0.6 x 0.31 x 0.27inches(15.24 x 8.0 x 6.8mm)

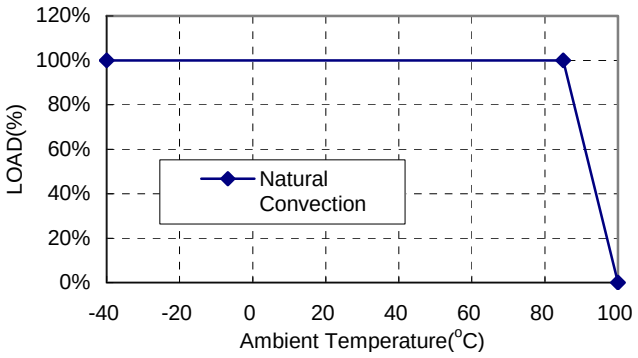
Case Material.....SIP Models.....Non-conductive black plastic
SMD Models.....Epoxy molding compound

Weight.....1.8g

NOTE :

1. Line regulation is per 1.0% change in input voltage
2. Load regulation is for load change from 100% to 20%
3. The output noise is measured with 0.33uF ceramic capacitor.
4. Suffix “S” to the model number with SMD packages
5. Maximum case temperature under any operating condition should not be exceeded 100℃.

Typical Derating curve for Natural Convection

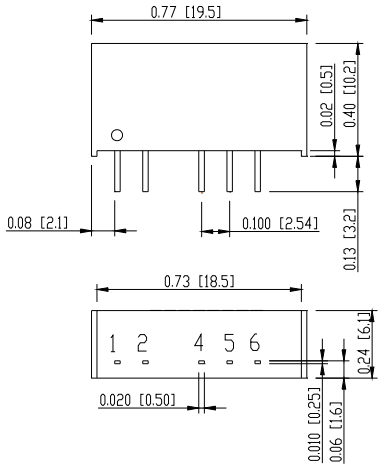


Dimensions:

All Dimensions In Inches(mm)

Tolerance	Inches	Millimeters
	X.XX±0.01	X.X±0.25
	X.XXX±0.005	X.XX±0.13
Pin	±0.002	±0.05

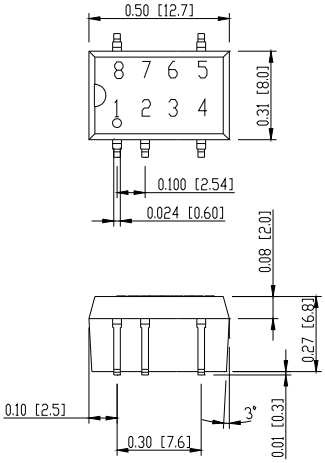
SIP PACKAGES



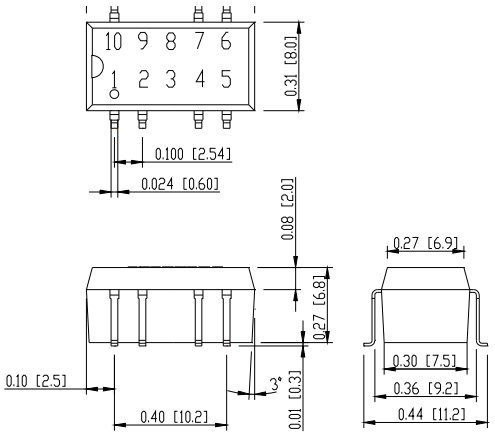
PIN CONNECTION		
Pin	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

NA:Not Available for Electrical Connection

SMD PACKAGES



PIN CONNECTION	
Pin	Single Output
1	-Vin
2	+Vin
3	No Pin
4	-Vout
5	+Vout
6	No Pin
7	No Pin
8	NA



PIN CONNECTION	
Pin	Dual Output
1	-Vin
2	+Vin
3	No Pin
4	Common
5	-Vout
6	NA
7	+Vout
8	No Pin
9	No Pin
10	NA