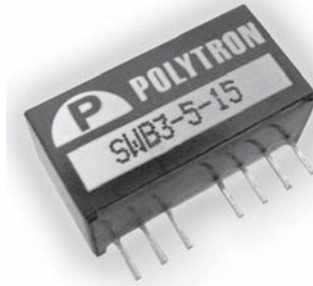




3 WATT SINGLE & DUAL OUTPUT

**Regulated,
Wide Input (4:1)
DC/DC Converters**



Specifications

All specifications are typical at nominal input, full load and 25°C, unless otherwise noted.

INPUT

Input Voltage Range	
24V nominal input	9 - 36 Vdc
48V nominal input	18 - 72 Vdc
Input Filter	Capacitor type
Input Surge Voltage	100mS max.
24V input	50 Vdc
48V input	100 Vdc
Input Reflected Ripple Current	
24V input	380mA _{p-p} max
48V input	200mA _{p-p} max
Start up time	Nominal Vin and constant resistor load
Power Up	30mS typ
Remote ON/OFF	30mS typ
Remote ON/OFF	DC-DC ON Open or high impedance
	DC-DC OFF Control pin applied current 2 ~ 4mA max. (via 1KΩ)
Remote OFF state Input current	Nominal Vin 2.5mA max.

OUTPUT

Output Power	3 Watts max.
Voltage Accuracy	Full load and nominal Vin ±1%
Minimum Load	0%
Line Regulation	LL to HL at Full load ±0.2%
Load Regulation	No load to full load Single ±1%
	5% load to 100% load Single ±0.5%
	No load to full load Dual ±1%
Cross Regulation (Dual)	Asymmetrical load 25%/100% FL ±5%
Ripple and Noise	20MHz bandwidth 30mV _{p-p}
Temperature Coefficient	±0.1%/ °C, max.
Transient Response Recovery Time	25% load step change 500μS, typ
Short Circuit Protection	Continuous, automatic recovery

GENERAL

Efficiency	See table
Isolation Voltage	1600 Vdc, Suffix "H" 3,000Vdc.
Isolation Resistance	10 ⁹ Ohms, min.
Isolation Capacitance	200pF, max.
Switching Frequency	Full load to minimum load 1000 KHz, min.

ENVIRONMENTAL

Operating Ambient Temperature	-40°C ~ +71°C (without derating)
	+71°C ~ +100°C (with derating)
Storage Temperature Range	-55°C to +125°C
Cooling	Free Air Convection
Thermal Shock	MIL-STD-810F
Vibration	MIL-STD-810F
Relative Humidity	5% to 95% RH

PHYSICAL

Design Meets Safety Standard	IEC60950-1, UL60950-1, EN60950-1
Case Material	Non-conductive black plastic
Base Material	None
Potting Material	Silicon (UL94-V0)
Dimensions	0.86" x 0.36" x 0.44" (21.8 x 9.2 x 11.1 mm)
Weight	4.8 g. (0.17 oz.)
MTBF (note①)	Bellcore TR-NWT-000332 3.963 x 10 ⁶ hrs.
	MIL-HDBK-217F 1.707 x 10 ⁶ hrs.

EMC CHARACTERISTICS

EMI (note⑤⑥)	EN55022			Class A
ESD	EN61000-4-3	Air ±8KV	Contact ±6KV	Perf. Criteria A
Radiated Immunity	EN61000-4-3	10V/m		Perf. Criteria A
Fast Transient (note⑥)	EN61000-4-4	± 2KV		Perf. Criteria A
Surge (note⑥)	EN61000-4-5	± 1KV		Perf. Criteria A
Conducted Immunity	EN61000-4-6	10 Vr.m.s.		Perf. Criteria A

FEATURES

- **4:1 Wide Input Voltage Range**
- **SIP Package**
0.86" x 0.36" x 0.44"
- **High Efficiency**
up to 82%
- **Low Ripple and Noise**
- **Input to Output Isolation up to 3,000Vdc**
- **Continuous Short Circuit Protection**
- **External On/Off Control**
- **RoHS Compliant**

SWB3 Series

