

# JA/JP Series



# DC/DC

## 15 Watts

Single/Dual/Triple Outputs

- 4:1 ultra wide input range  
9-36 Vdc  
20-72 Vdc
- Remote shutdown
- 100kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding

## Specifications

### INPUT

Voltage Range	9-36Vdc 20-72Vdc
Filtering	All Models
Reverse Polarity Protected	To Nominal Input Current External Fuse Required
Remote On/Off Control	All Models

### OUTPUT

Voltage Tolerance	± 1% Main ± 3% Auxiliary
Ripple and Noise	50mV pk-pk (Main) 100mV pk-pk (Aux)
Short Circuit Protection	Continuous Power Cycle
Temperature Coefficient	0.02% / °C

### GENERAL

Regulation:	Main	Aux
Line	1.0%	2.0%
Load	2.0%	6.0%
Efficiency	80-85% (typ)	
I/O Isolation	500 Vdc	
Switching Frequency	100khz (typ)	

### ENVIRONMENTAL

Operating Temperature	-25°C to +71°C No Derating
Storage Temperature	-25°C to +105°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The 15-Watt JA/JP series operates over an ultra wide range of 9-36 Vdc or 20-72 Vdc. Efficiencies of 80% are typical over varying load conditions of 25% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL, short circuit protection with auto restart, overvoltage protection, and an operating temperature range of -25°C to +71°C with no derating. Units are packaged in a six-sided continuous shielded case for EMI/RFI protection and measure 2.0" x 2.0" x 0.40".

## Applications

These units are ideally suited for telecommunications and applications having a widely varying input voltage such as automotive test equipment, process control, minicomputers and geosurvey equipment.



**SEMICONDUCTOR  
CIRCUITS, INC.**

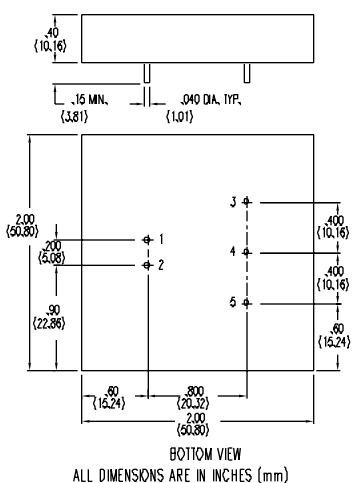
toll-free 888.438.3232 toll-free 888.GET.DCDC

# JA/JP Series Ordering Information

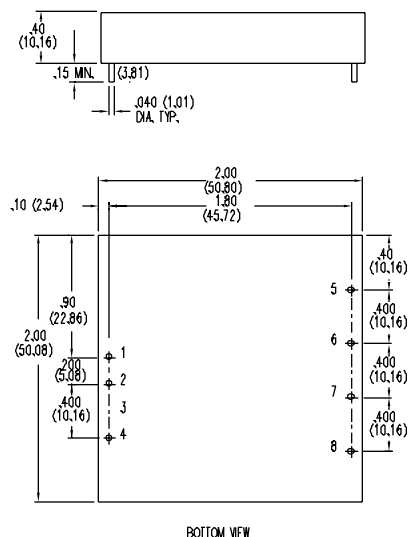
Input Voltage Range	Output Voltage	Output Current	Case	Model Number	Case	Model Number
9-36 Vdc 20-72 Vdc	5 Vdc 5 Vdc	3000mA 3000mA	1 1	JA11-300-18 JA11-300-48	2 2	JP11-300-18 JP11-300-48
9-36 Vdc 20-72 Vdc	12 Vdc 12 Vdc	1250mA 1250mA	1 1	JA12-125-18 JA12-125-48	2 2	JP12-125-18 JP12-125-48
9-36 Vdc 20-72 Vdc	15 Vdc 15 Vdc	1000mA 1000mA	1 1	JA13-100-18 JA13-100-48	2 2	JP13-100-18 JP13-100-48
9-36 Vdc 20-72 Vdc	±12 Vdc ±12 Vdc	±625mA ±625mA	1 1	JA22-125-18 JA22-125-48	2 2	JP22-125-18 JP22-125-48
9-36 Vdc 20-72 Vdc	±15 Vdc ±15 Vdc	±500mA ±500mA	1 1	JA23-100-18 JA23-100-48	2 2	JP23-100-18 JP23-100-48
9-36 Vdc 20-72 Vdc	+5 / ±12Vdc +5 / ±12Vdc	1500 / ±300mA 1500 / ±300mA	2 2	JP34-210-18 JP34-210-48	2 2	JP34-210-18 JP34-210-48
9-36 Vdc 20-72 Vdc	+5 / ±15Vdc +5 / ±15Vdc	1500 / ±250mA 1500 / ±250mA	2 2	JP35-200-18 JP35-200-48	2 2	JP35-200-18 JP35-200-48

## Dimensions and Connections

CASE 1



CASE 2



**NOTES:**

1. Ripple measured with a 3.3 mf tantalum capacitor across each output.
2. Load regulation from full load to minimum load with all other outputs at rated load.
3. Minimum current required on 5V out only.
4. Maximum total power from all outputs is 15 Watts and no output is to exceed its maximum rated current.

External Output Trimming: Output may be externally trimmed ±10% (Single and Dual outputs only).

Remote ON/Off Control (pin 8) common referenced to Minus input (pin 2).  
On greater than 4 Vdc or open circuit  
Off less than 1.2 Vdc

Pins 0.040 (1.0) dia x 0.20 (5.1) lg min.

NOTE: ALL DIMENSIONS ARE IN INCHES (mm).

**CASE 1  
PIN CONNECTIONS**

**Single Output**

1. +Input
2. -Input
3. +Output
4. No Pin
5. -Output

**CASE 1  
PIN CONNECTIONS**

**Dual Outputs**

1. +Input
2. -Input
3. +Output
4. Common
5. -Output

**CASE 2  
PIN CONNECTIONS**

**Single Output**

1. +Input
2. -Input
3. No Pin
4. Remote O/Off
5. No Pin
6. +Output
7. -Output
8. Trim

**CASE 2  
PIN CONNECTIONS**

**Dual Outputs**

1. +Input
2. -Input
3. No Pin
4. Remote On/Off
5. +12 or 15 Output
6. Common
7. -12 or 15 Output
8. Trim

**CASE 2  
PIN CONNECTIONS**

**Triple Outputs**

1. +Input
2. -Input
3. No Pin
4. Remote On/Off
5. +12 or 15 Output
6. +5 Output
7. -12 or 15 Output
8. Trim