



# 5-10 WATT SINGLE/DUAL/TRIPLE OUTPUT

## Isolated, Regulated DC/DC Converters



### FEATURES

- High Performance  $\pi$  Input Filter
- Short Circuit Protection
- Extremely Low Output Noise
- Highly Regulated Floating Outputs
- Low Input Reflected Ripple
- P.C. Card Mounting

PR Series

### Specifications

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

#### INPUT

Voltage Range..... $\pm 10\%$   
 Input Filter.....Pi Network

#### OUTPUT

Voltage Accuracy..... $\pm 1\%$  (fixed)  
 Line Regulation ..... $\pm 0.05\%$   
 Load Regulation..... $\pm 0.05\%$ ; 0.1% for PR87S  
 Ripple Noise (20 MHz BW).....1mVrms max.

#### GENERAL

Efficiency.....55-65%  
 Isolation Voltage.....500 Vdc min.  
 Protection.....Short Circuit Protection

#### ENVIRONMENTAL

Operating Temperature Range.....-25 to +71°C  
 Storage Temperature Range.....-55 to +85°C  
 Cooling.....Free Air Convection

#### PHYSICAL

##### Dimensions

Case A1.....3.50" x 2.50" x 0.875"  
 Case B1.....2.00" x 2.00" x 0.40"  
 Case B2.....2.00" x 2.00" x 0.40"  
 Case C1.....2.00" x 2.00" x 0.875"

Selection Guide

(Continued)

	Input Voltage Nominal (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Model Number	Case	
<b>SINGLE OUTPUT VOLTAGE</b>	5	5	600	PR87S	B1	
		5	1000	PR88S	C1	
		5	2000	PR89S	A1	
		12	400	PR12S	B1	
		15	300	PR15S	B1	
	9	5	600	PR87S-9	B1	
		5	1000	PR88S-9	C1	
		5	2000	PR89S-9	A1	
		12	400	PR12S-9	B1	
		15	300	PR15S-9	B1	
	12	5	600	PR87S-12	B1	
		5	1000	PR88S-12	C1	
		5	2000	PR89S-12	A1	
		12	400	PR12S-12	B1	
		15	300	PR15S-12	B1	
	15	5	600	PR87S-15	B1	
		5	1000	PR88S-15	C1	
		5	2000	PR89S-15	A1	
		12	400	PR12S-15	B1	
		15	300	PR15S-15	B1	
24	5	600	PR87S-24	B1		
	5	1000	PR88S-24	C1		
	5	2000	PR89S-24	A1		
	12	400	PR12S-24	B1		
	15	300	PR15S-24	B1		
28	5	600	PR87S-28	B1		
	5	1000	PR88S-28	C1		
	5	2000	PR89S-28	A1		
	12	400	PR12S-28	B1		
	15	300	PR15S-28	B1		
36	5	600	PR87S-36	B1		
	5	1000	PR88S-36	C1		
	5	2000	PR89S-36	A1		
	12	400	PR12S-36	B1		
	15	300	PR15S-36	B1		
48	5	500	PR87S-48	B1*		
	5	1000	PR88S-48	B1*		
	5	2000	PR89S-48	B1*		
	12	450	PR12S-48	B1*		
	15	350	PR15S-48	B1*		
<b>DUAL OUTPUT VOLTAGE</b>	5	±12	±150	PR81-12	B1*	
		±12	±250	PR82-12	B1*	
		±12	±350	PR83-12	A1	
		±15	±150	PR81-15	B1*	
		±15	±250	PR82-15	B1*	
		±15	±350	PR83-15	A1	
	9	±12	±150	PR81-12-9	B1*	
		±12	±250	PR82-12-9	B1*	
		±12	±350	PR83-12-9	A1	
		±15	±150	PR81-15-9	B1*	
		±15	±250	PR82-15-9	B1*	
		±15	±350	PR83-15-9	A1	
	12	±12	±150	PR81-12-12	B1*	
		±12	±250	PR82-12-12	B1*	
		±12	±350	PR83-12-12	A1	
±15		±150	PR81-15-12	B1*		
±15		±250	PR82-15-12	B1*		
±15		±350	PR83-15-12	A1		



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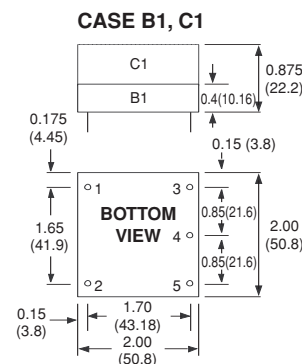
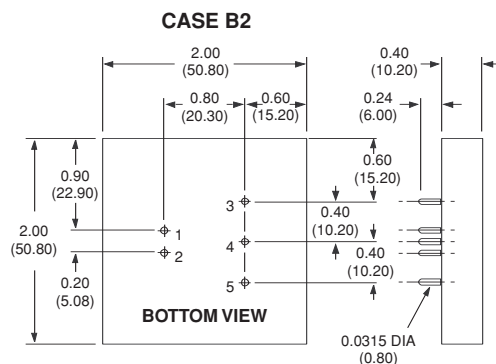
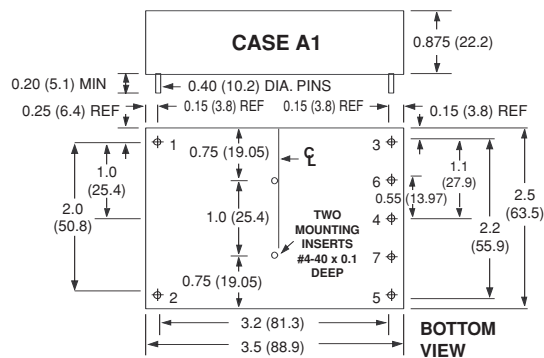
	Input Voltage Nominal (Range) (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Model Number	Case
<b>DUAL OUTPUT VOLTAGE</b>	15	±12	±150	PR81-12-15	B1*
		±12	±250	PR82-12-15	B1*
		±12	±350	PR83-12-15	A1
		±15	±150	PR81-15-15	B1*
		±15	±250	PR82-15-15	B1*
		±15	±350	PR83-15-15	A1
	24	±12	±150	PR81-12-24	B1*
		±12	±250	PR82-12-24	B1*
		±12	±350	PR83-12-24	A1
		±15	±150	PR81-15-24	B1*
		±15	±250	PR82-15-24	B1*
		±15	±350	PR83-15-24	A1
	36	±12	±150	PR81-12-36	B1*
		±12	±250	PR82-12-36	B1*
		±12	±350	PR83-12-36	A1
±15		±150	PR81-15-36	B1*	
±15		±250	PR82-15-36	B1*	
±15		±350	PR83-15-36	A1	
48	±12	±220	PR82-12-48	B1*	
	±15	±170	PR82-15-48	B1*	
<b>TRIPLE</b>	5	5/±12	600/±150	PR97-12	A1
		5/±15	600/±150	PR97-15	A1
	12	5/±12	600/±150	PR97-12-12	A1
		5/±15	600/±150	PR97-15-12	A1
	24	5/±12	600/±150	PR97-12-24	A1
		5/±15	600/±150	PR97-15-24	A1

\*Available in alternate pin configuration Case "B2".  
Add suffix "C" after model number.

**Mechanical Specifications**

CONNECTIONS (A1, B1, B2, C1)

I/O Connections			
Pin	SINGLE	DUAL	TRIPLE
1	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin
3	+Vout	+Vout	COM (5)
4	N/C	Common	-12 / -15
5	-Vout	-Vout	+12 / +15
6	No Pin	No Pin	+5
7	No Pin	No Pin	COM (12/15)



All Dimensions are in inches (mm)



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