

3 & 5 WATT REGULATED

DC/DC CONVERTERS W SERIES



FEATURES

- Input/Output isolated
- Continuous short circuit protected, self recovering
- Line regulation 0.02%
- Load regulation 0.02%
- Wide input range
- No derating to 71°C
- Single and dual outputs
- Recommended for high speed analog applications
- PC mountable
- Designed to meet FCC Sec 15, Sub Part J, A&B
- High power density
- Pi input filter
- 100% burned-in and triple tested
- 3 year warranty

GENERAL DESCRIPTION

The W-Series is designed for the wider input voltage range requirements of board level DC power distribution. The series operates from nominal inputs of 5, 12 or 24 VDC with single and dual output voltages. Outputs feature extremely low noise. They are an ideal power source for battery backed-up and solar systems using high speed A/D and D/A converters with buffer memory.

GENERAL ELECTRICAL SPECIFICATIONS

(Specifications at Nominal Input and 25°C)

PARAMETER	LIMIT	CONDITIONS
Input Filter	Pi Filter	All Device Types
Input/Output Isolation		
Voltage	500 VDC (Min.)	All Device Types
Resistance	10 ³ megohms (Min.)	
Output Voltage Accuracy	± 1%	Factory Set
Load Regulation	0.02% (Max.)	NL to FL ± 12V and ± 15V Output Models
	0.1% (Max.)	5V Output Models
Line Regulation	0.02% (Max.)	Low Line to High Line
Output Voltage Stability	0.02%/°C	Typical
Output Noise/Ripple	40mV, P-P (Max.)	20HZ-20MHZ Bandwidth
Short Circuit Protection	Current Limited	All Units
Duration	Continuous	
Thermal Overload		
Protection	All Units	
Switching Frequency	25 KHZ	
Operating Temperature	-25°C to + 71°C	
Derating	None	To 71°C
Storage Temperature	-35°C to + 125°C	

**SELECTION GUIDE
STANDARD PRODUCTS**

DEVICE TYPE	INPUT VOLTAGE RANGE (VDC)	INPUT CURRENT A (MAX)	OUTPUT VOLTAGE VDC	OUTPUT CURRENT mA (MAX)	PACKAGE
3W5R5	4.5 - 5.5	1.300	+ or - 5	600	A
3W5R12-12	4.5 - 5.5	1.250	± 12	± 125	A
3W5R15-15	4.5 - 5.5	1.332	± 15	± 100	A
5W5R12-12	4.5 - 5.5	1.810	± 12	± 210	B
3W12R15-15	10.8 - 15	.520	± 15	± 100	A
5W12R12-12	10.8 - 15	.842	± 12	± 210	B
3W24R5	21.6 - 30	.280	+ or - 5	600	A
3W24R12-12	21.6 - 30	.300	± 12	± 125	A
3W24R15-15	21.6 - 30	.350	± 15	± 100	A
5W24R5	21.6 - 30	.390	+ or - 5	1000	B
5W24R12-12	21.6 - 30	.425	± 12	± 210	B

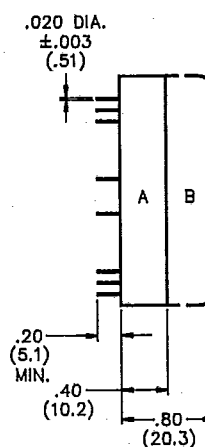
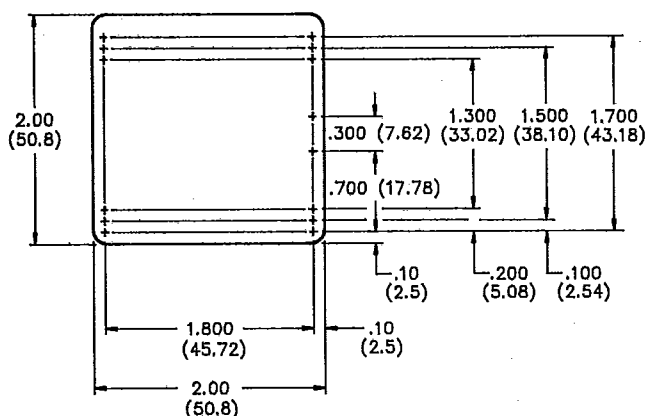
SELECTION GUIDE NON-STOCKED PRODUCT

(Minimum Order Quantities Apply, Consult Factory)

DEVICE TYPE	INPUT VOLTAGE RANGE (VDC)	INPUT CURRENT A (MAX)	OUTPUT VOLTAGE VDC	OUTPUT CURRENT mA (MAX.)	PACKAGE
5W5R15-15	4.5 - 5.5	1.810	± 15	± 150	B
3W12R5	10.8 - 15	.520	+ or - 5	600	A
3W12R12-12	10.8 - 15	.520	± 12	± 125	A
5W12R5	10.8 - 15	.833	+ or - 5	1000	B
5W12R15-15	10.8 - 15	.798	± 15	± 160	B
5W24R15-15	21.6 - 30	.425	± 15	± 150	B

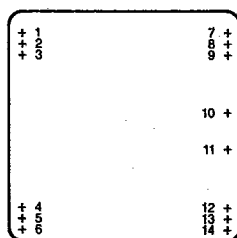
MECHANICAL DIMENSIONS AND PIN CONNECTIONS

W



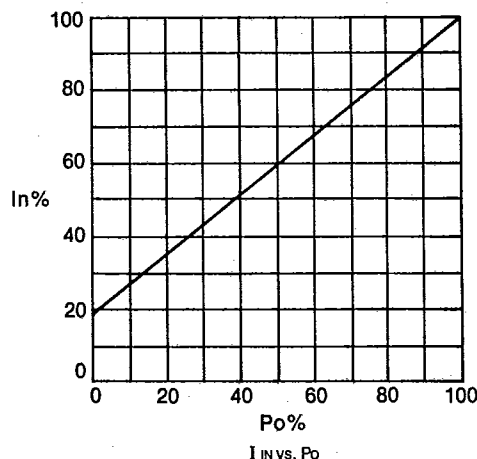
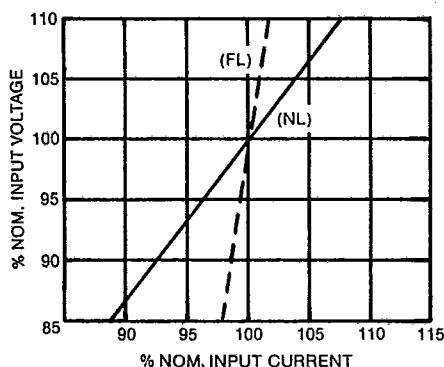
Note: All dimensions in parentheses are mm.

Tolerances unless otherwise specified: .XX ± .03
.XXX ± .010

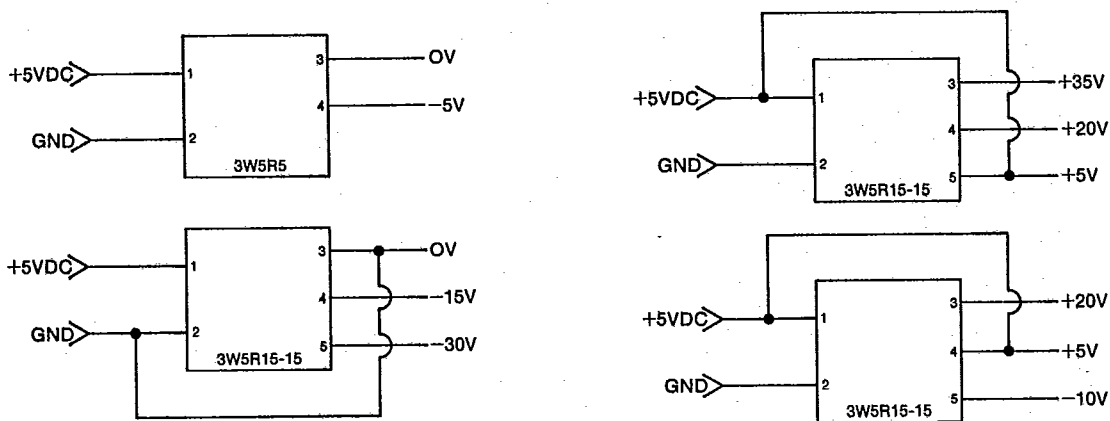


PIN	SINGLE OUTPUT	DUAL OUTPUT
1-3	+ INPUT	+ INPUT
4-6	- INPUT	- INPUT
7-9	+ OUTPUT	+ OUTPUT
10-11	COMMON	COMMON
12-14	COMMON	- OUTPUT

PERFORMANCE DATA



OUTPUT CONFIGURATION OPTIONS



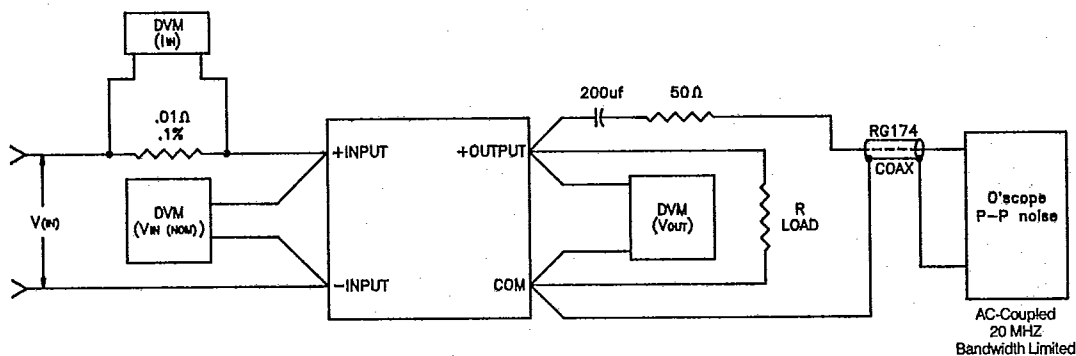
Standard isolated outputs: 5, ± 12 , ± 15 VDC

Combined isolated outputs: 24, 30VDC

Combined non-isolated outputs: -3, -5, -6, -7, -10, -12, -15, -19, -24, -25, -30, +5, +10, +12, +15, +17, +20, +24, +27, +29, +30, +35, +36, +39, +42, +48, +54VDC.

- Achieving these voltages is dependent on model-type selected and configuration used. Please contact factory for assistance in selection.

TEST CIRCUIT SCHEMATIC



Note: When measuring output noise use most direct connections to ensure correct readings. All noise measurements taken within 20HZ to 20 MHZ BW.

Caution: (1) Do not insert or remove device with power applied. (2) Care must be taken to observe input polarity.

TYPICAL APPLICATION

3W5R15-15

