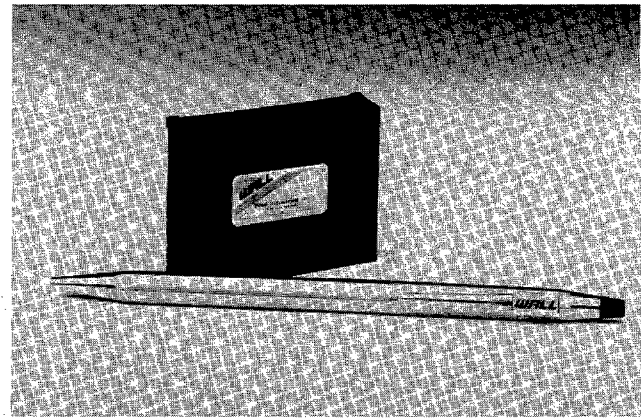


UP TO 20 WATTS - YF SERIES

Ultra-Wide Input, Low Quiescent Current

FEATURES

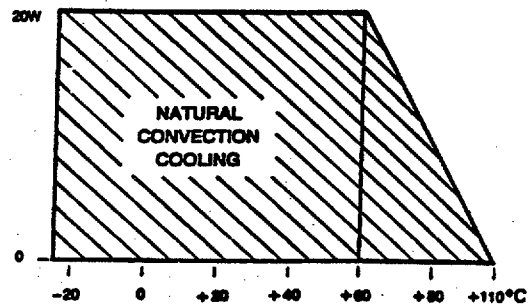
- ◆ Single and Dual Outputs
- ◆ Industry Standard Package and Pin-Out
- ◆ Pi Input Filter Integral to Converter
- ◆ 1600VDC I/O Isolation
- ◆ Regulated Output
- ◆ Continuous short circuit protection
- ◆ Remote On/Off Feature
- ◆ Five Year Warranty.



THE YF SERIES FROM WALL INDUSTRIES

The YF series of single and dual output DC/DC converters performs over an ultra-wide input voltage range (2:1 & 4:1), providing indefinite short circuit and overvoltage protection. The series' design technology allows 20 watts of output power from a 1.60" x 2.0" x 0.40" case. These current mode control forward converters are designed for improved transient response and reduced stress on switching components and do not require external input filtering, making it a preferred source over industry alternatives.

OPERATING TEMPERATURE LIMITS AND OUTPUT POWER RANGE



SPECIFICATIONS: YF SERIES

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltages18-36, 36-72, 9-36, 20-72VDC
 Nominal Input24, 48VDC
 Remote On/Off Control.....CMOS or TTL (see note 7)
 Input FilterPi input filter

OUTPUT SPECIFICATIONS

Output Currentsee table
 Output Voltage Tolerance± 2%
 Output Trim (external)± 10%
 Line Regulation: full line± 0.5%
 Load Regulation
 Singles (25-100% load)± 0.5%
 (NL-100% load)± 1%
 Duals (50-100% load)± 1%
 (NL-100% load)± 5%
 Short Circuit Protectioncontinuous
 Ripple/Noise (20MHz BW).....≤75mV P-P
 Transient Response.....<500msec to within ± 1% Vout

GENERAL SPECIFICATIONS

Efficiency83% typical
 Isolation Voltage (input to output).....1600VDC min.
 Isolation Resistance (input to output).....1000MΩ
 Switching Frequency300kHz typical

ENVIRONMENTAL SPECIFICATIONS

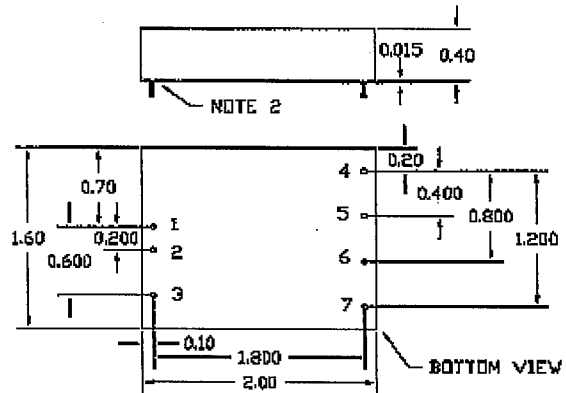
Operating Temperature (case)-25 to +60°C
(see derating curve)
 Storage Temperature-55 to +125°C
 Humidity (non-condensing)20 - 95% R.H.

PHYSICAL SPECIFICATIONS

Weightapprox. 4.0 oz.
 Dimensions1.6 x 2.0 x 0.40"
 Case MaterialNickel coated copper,
non-conductive baseplate
 ShieldingSix-Sided

Due to advances in technology, specifications subject to change without notice.

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (Amps)	Over Voltage Protection (VDC)	Model Number
18-36	5	4.0	6.2	YF24S5-4000
	12	1.67	15	YF24S12-1670
	15	1.33	18	YF24S15-1330
	± 12	0.83	15	YF24D12-830
	± 15	0.66	18	YF24D15-660
36-72	5	4.0	6.2	YF48S5-4000
	12	1.67	15	YF48S12-1670
	15	1.33	18	YF48S15-1330
	± 12	0.83	15	YF48D12-830
	± 15	0.66	18	YF48D15-660
20-72	5	3.0	6.2	YFW48S5-3000
	12	1.25	15	YFW48S12-1250
	15	1.0	18	YFW48S15-1000
	± 5	1.50	6.2	YFW48D5-1500
	± 12	0.62	15	YFW48D12-620
	± 15	0.50	18	YFW48D15-500
9-36	5	4.0	6.2	YFW24S5-4000
	12	1.66	15	YFW24S12-1600
	15	1.33	18	YFW24S15-1330
	± 5	1.50	6.2	YFW24D5-1500
	± 12	0.83	15	YFW24D12-830
20-72	5	4.0	6.2	YFW48S5-4000
	12	1.66	15	YFW48S12-1600
	15	1.33	18	YFW48S15-1300
	± 12	0.83	15	YFW48S15-1300
	± 15	0.66	18	YFW48D15-660



PIN CONNECTIONS		
	Single	Dual
1	+ Vin	+ Vin
2	- Vin	- Vin
3	Remote	Remote
4	No Pin	+ Vout
5	+ Vout	Output Common
6	- Vout	- Vout
7	Trim	Trim

Notes:

- All case and pin to case dimensions reference only unless otherwise noted.
- All DC/DC converters should be externally fused on the front end for protection.
- P.C. pins - 0.04" dia. x 0.18" long (min); typical seven places
- Pin to pin tolerance ± 0.01". Pin diameter tolerance ± 0.005"
- Duals: 1/4 load to full load: {1% and no load to full load: ± 5%.
- Significant capacitive load on output may inhibit start-up and operation, consult factory.
- On-control: 5.5V min. or Open. Off-Control: 0.4V max. or short. Control voltage referenced to -Vin.
- Input pi-filter without external capacitor filter.