

YF SERIES



TO 20 WATTS

UP TO 20 WATTS - YF SERIES

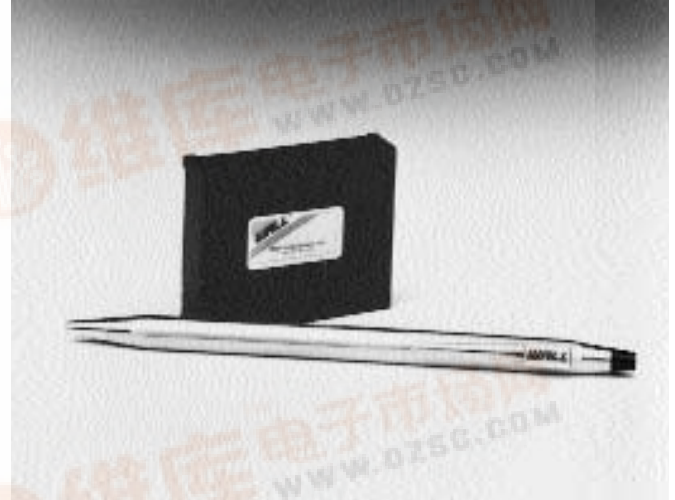
ULTRA-WIDE INPUT, LOW QUIESCENT CURRENT

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
- Ten 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.



SPECIFICATIONS: YF SERIES

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

INPUT SPECIFICATIONS

Input Voltages.....18-36,36-75,9-36,20-75,18-75VDC
 Nominal Input.....24, 48VDC
 Remote On/Off Control.....CMOS or TTL (see note 7)
 Input Filter.....Pi input filter

OUTPUT SPECIFICATIONS

Output Current.....see table
 Output Voltage Tolerance.....±2%
 Output Trim (external).....±10%
 Line Regulation: full line.....±0.5%
 Line Regulation: 20 Watt 4:1
 Input.....±1%
 Load Regulation
 Singles (25-100% load).....±0.5%
 (NL-100% load)±1%
 Duals (50-100% load)±1%
 (NL-100% load)±5%
 Short Circuit Protection.....continuous

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)1000MW
 Switching Frequency300kHz typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (case)-25 to +105°C
 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
 Shielding.....Six-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
9-18	3.3	4.0	3.9	YF12S33-4000
	5	4.0	6.2	YF12S5-4000
	12	1.67	15	YF12S12-1600
	15	1.33	18	YF12S15-1330
	± 12	0.83	15	YF12D12-830
18-36	3.3	4.0	3.9	YF24S33-4000
	5	4.0	6.2	YF24S5-4000
	12	1.67	15	YF24S12-1600
	15	1.33	18	YF24S15-1330
	± 12	0.83	15	YF24D12-830
	± 15	0.66	18	YF24D15-660
	± 15	0.66	18	YF12D15-660
36-75	3.3	4.0	3.9	YF48S33-4000
	5	4.0	6.2	YF48S5-4000
	12	1.67	15	YF48S12-1600
	15	1.33	18	YF48S15-1330
	9-36	5	3.0	6.2
12		1.25	15	YFW24S12-1250
15		1.0	18	YFW24S15-1000
± 5		1.50	6.2	YFW24D5-1500
± 12		0.62	15	YF24D12-625
± 15		0.50	18	YFW24D15-500
20-75	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	0.83	15	YF48D12-830
	± 15	0.66	18	YF48D15-660
	9-36	5	4.0	6.2
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
± 15		0.66	18	YFW24D15-660
18-75	5	4.0	6.2	YFW48S5-4000
	12	1.66	15	YFW48S12-1600
	15	1.33	18	YFW48S15-1300
	± 12	0.83	15	YFW48D12-830
	± 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:

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

