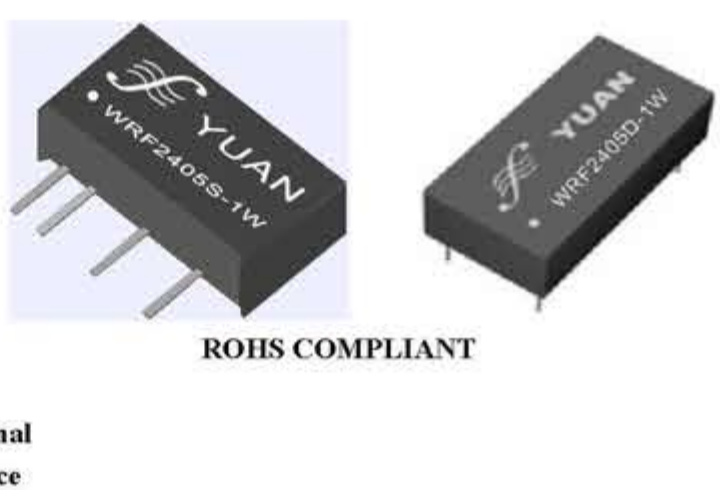


- SHORT CIRCUIT PROTECTION
- SIP/DIP PACKAGE STYLE
- SINGLE OUTPUT VOLTAGE
- INDUSTRIAL STANDARD PIN-OUT
- NO HEAT SINK REQUIRED
- 3KVDC ISOLATION
- REGULATED OUTPUT VOLTAGE
- PCB MOUNTING



ROHS COMPLIANT

- Application:**
- Specialty for electric load management terminal
 - RS485/RS232/RS422/USB/IEEE1394 interface
 - Isolation static

ELECTRICAL SPECIFICATIONS:

(All specifications tested typically @ 25°C, humidity<75%, nominal input and rated output unless otherwise noted.)

OUTPUT SPECIFICATIONS

Items:	Testing condition	Min	Typ	Max
Output accuracy:	At full load and nominal Vin			±2%
Output power:				1W
Line regulation:	Input voltage from low to full load	+/- 0.5% max., (3.3 VDC output +/- 1% max.)		
Load regulation:	No load to full load	+/- 0.5% typ., +/- 1% max.		
Ripple and noise:				50mVp-p
Temperature drift:				±0.02 %/°C
Minimum load:				10%
Switching frequency:			120K HZ	
Over load protection:	% of FL at nominal input, refer to figure			
Short circuit protection:	Continuous >30seconds, Automatic Recovery			

INPUT SPECIFICATIONS

Items:	Testing condition	Min	Typ	Max
Input voltage range	5VDC nominal input	4.5-5.5VDC		
	12VDC nominal input	10.8-13.2VDC		
	15VDC nominal input	13.5-16.5VDC		
	24VDC nominal input	21.6-26.4VDC		
Input filter		Ceramic capacitance		

COMMON SPECIFICATIONS

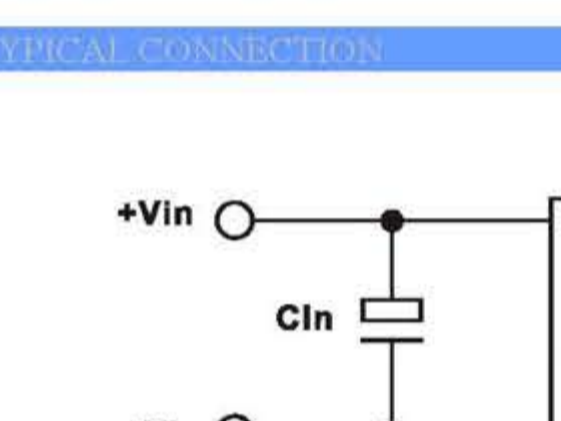
Items	Min	Typ.	Max
Operating temperature range	-25°C		+71°C
Storage temperature range	-55°C		+105°C
Humidity			<90%
Cooling	Free Air Convection		
Isolation voltage (VDC)	Input to Output		3,000
Isolation resistance (ohms)		10 ⁹	
Isolation capacitance (pF)		60	
Efficiency (%)	See Product List	58	70

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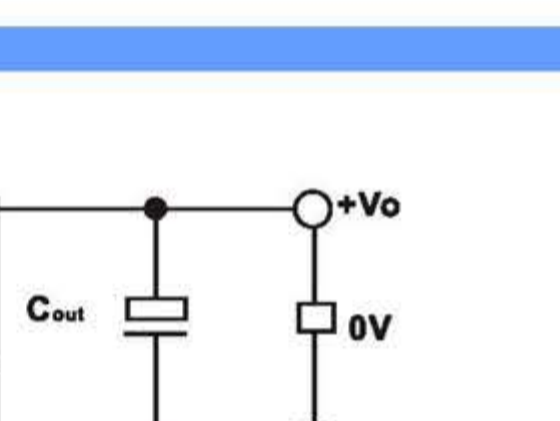
Case material	Non-conductive black plastic
Potting material	Epoxy Resin UL94-V0
Packing material	Tube
Dimension (mm / inch)	SIP: 19.60*6.00*10.00 (0.77*0.23*0.39) DIP: 20.40*10.0*8.20 (0.80*0.39*0.32)
Weight (g)	10
MTBF (Hrs)	>1,000,000

Part No.	Vin(VDC)	Iin(No-Load) mA	Iin(Full-Load) mA	Vout (VDC)	Iout,Max(mA)	Eff.
WRF0503S-1W	5	22	220	3.3	200	60
WRF0505S-1W	5	28	300	5	200	66
WRF0512S-1W	5	25	312	12	84	64
WRF1205S-1W	12	16	130	5	200	64
WRF1212S-1W	12	22	123	12	84	68
WRF1209S-1W	12	16	123	9	111	68
WRF2405S-1W	24	7	64	5	200	65
WRF2409S-1W	24	10	63	9	111	66
WRF2412S-1W	24	10	63	12	84	66

NOMENCLATURE



TEMPERATURE DERATING GRAPH

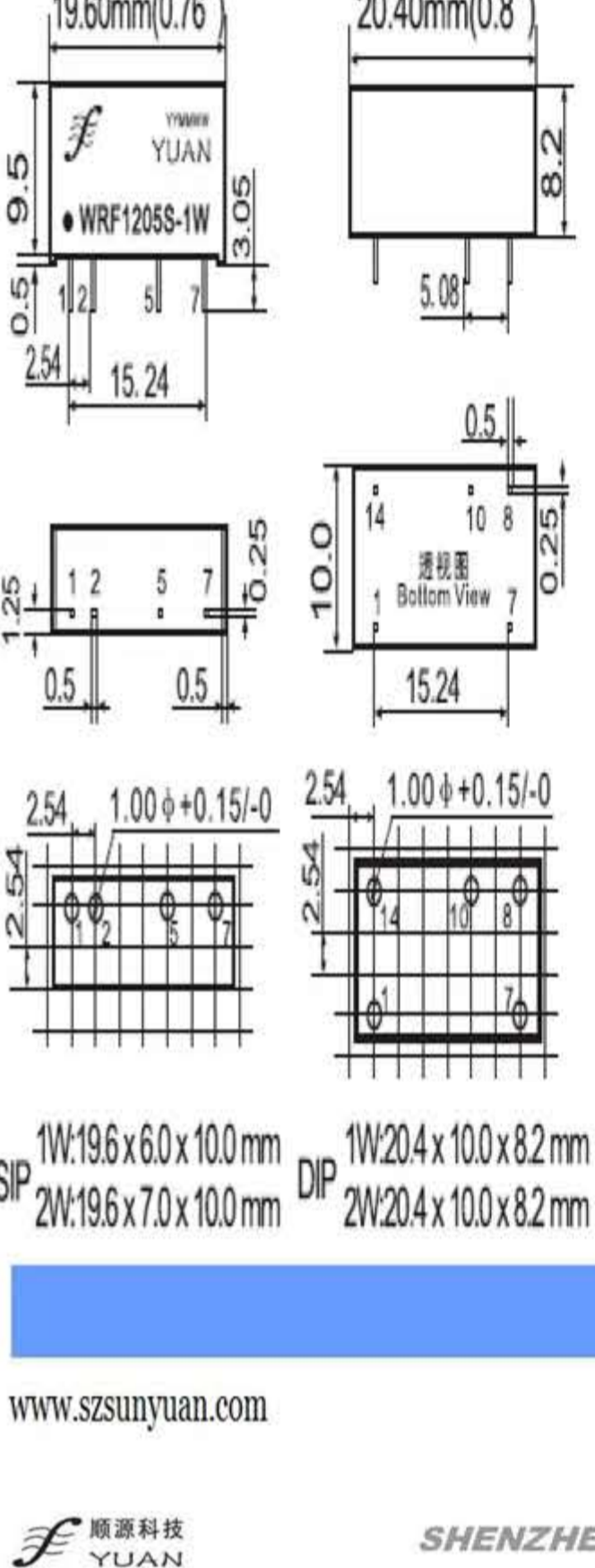


TYPICAL CONNECTION



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OUTLINE DIMENSION



PINS DESCRIPTION

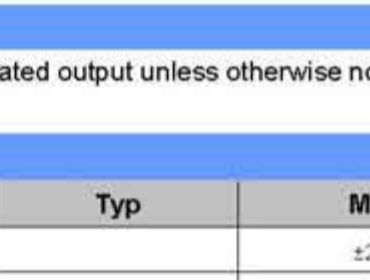
Pin /SIP	Connection	Pin /DIP
1	Vin+ Input	14
2	Vin- Input	1
5	GND Output	10
7	Vout+ Output	8
	NC	7

SIP 1W: 19.6 x 6.0 x 10.0 mm
2W: 19.6 x 7.0 x 10.0 mm
DIP 1W: 20.4 x 10.0 x 8.2 mm
2W: 20.4 x 10.0 x 8.2 mm

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SHENZHEN SUNYUAN TECHNOLOGY CO., LTD.

- SHORT CIRCUIT PROTECTION
- SIP7 PACKAGE STYLE
- SINGLE OUTPUT VOLTAGE
- INDUSTRIAL STANDARD PIN-OUT
- 3KVDC ISOLATION
- REGULATED OUTPUT VOLTAGE
- PCB MOUNTING



ISO9001:2008



ELECTRICAL SPECIFICATIONS:

(All specifications tested typically @ 25°C, humidity<75%, nominal input and rated output unless otherwise noted.)

OUTPUT SPECIFICATIONS

Items:	Testing condition	Min	Typ	Max
Output accuracy:	full load from 0-100%			±2%
Output power:				2W
Line regulation:	Input voltage from low to full load	+/- 1.2% / 1.0% of Vin		
Load regulation:	20% load to full load	+/- 8%		
Ripple and noise:	20MHz BW			50mVp-p
Temperature drift:				±0.02 %/°C
Switching frequency:			60K HZ	125
Short circuit protection:	Continuous >20seconds, Automatic Recovery			

INPUT SPECIFICATIONS

Items:	Testing condition	Min	Typ	Max
Input voltage range: +/- 10%	5VDC nominal input	4.75-5.25VDC		
	12VDC nominal input	10.8-13.2VDC		
	15VDC nominal input	13.5-16.5VDC		
	24VDC nominal input	21.6-26.4VDC		
Filter		Ceramic Capacitors		

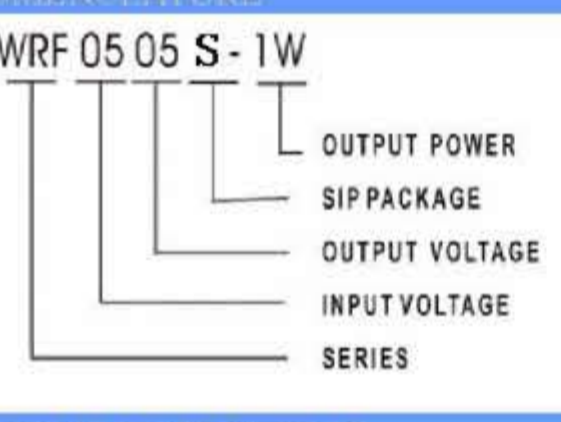
COMMON SPECIFICATIONS

Items	Min	Typ.	Max
Operating temperature range	-25°C		+71°C
Storage temperature range	-55°C		+105°C
Humidity			<90%
Cooling	Free Air Convection		
Isolation voltage (VDC)	Input to Output		3,000
Isolation resistance (ohms)		10 ⁹	
Isolation capacitance (pF)		60	
Leak Current		1mA	
Efficiency (%)	See Product List	68	75
Case material	Non-conductive black plastic		
Potting material	Epoxy Resin UL94-V0		

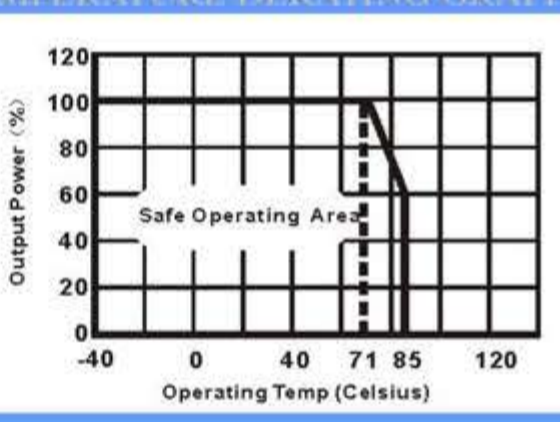
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Part No.	Vin(VDC)	Iin(No-Load) mA	Iin(Full-Load) mA	Vout (VDC)	Iout,Max(mA)	Eff.
WRF0505S-WS	5	25	165	5	100	61
WRF1205S-WS	12	16	66	5	100	63
WRF2405S-WS	24	12	35	5	100	62
WRF0503S-1W	5	35	505	3.3	303	60
WRF0505S-1W	5	30	317	5	200	63
WRF0512S-1W	5	28	312	12	84	64
WRF1212S-1W	12	15	123	12	84	68
WRF1205S-1W	12			5		
WRF1209S-1W	12	16	126	9	111	66
WRF2405S-1W	24	10	64	5	200	65
WRF2409S-1W	24	9	63	9	111	66
WRF2412S-1W	24	8	63	12	84	66
WRF2415S-1W	24	7	62	15	67	67
WRF0512S-2W	5	38	588	12	167	68
WRF0505S-2W	5	46	579	5	400	65
WRF0509S-2W	5	42	606	9	200	66
WRF1212S-2W	12	21	245	12	167	68
WRF2405S-2W	24	12	128	5	400	65

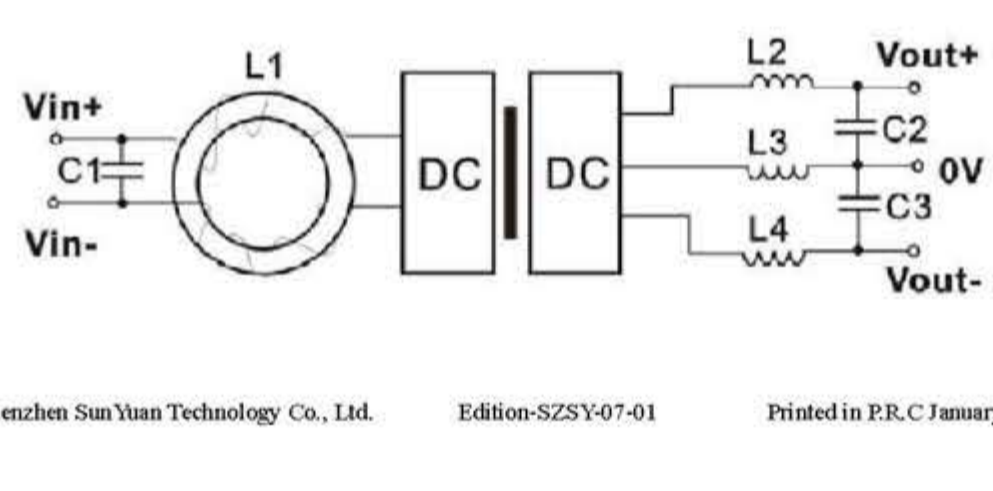
NOMENCLATURE



TEMPERATURE DERATING GRAPH

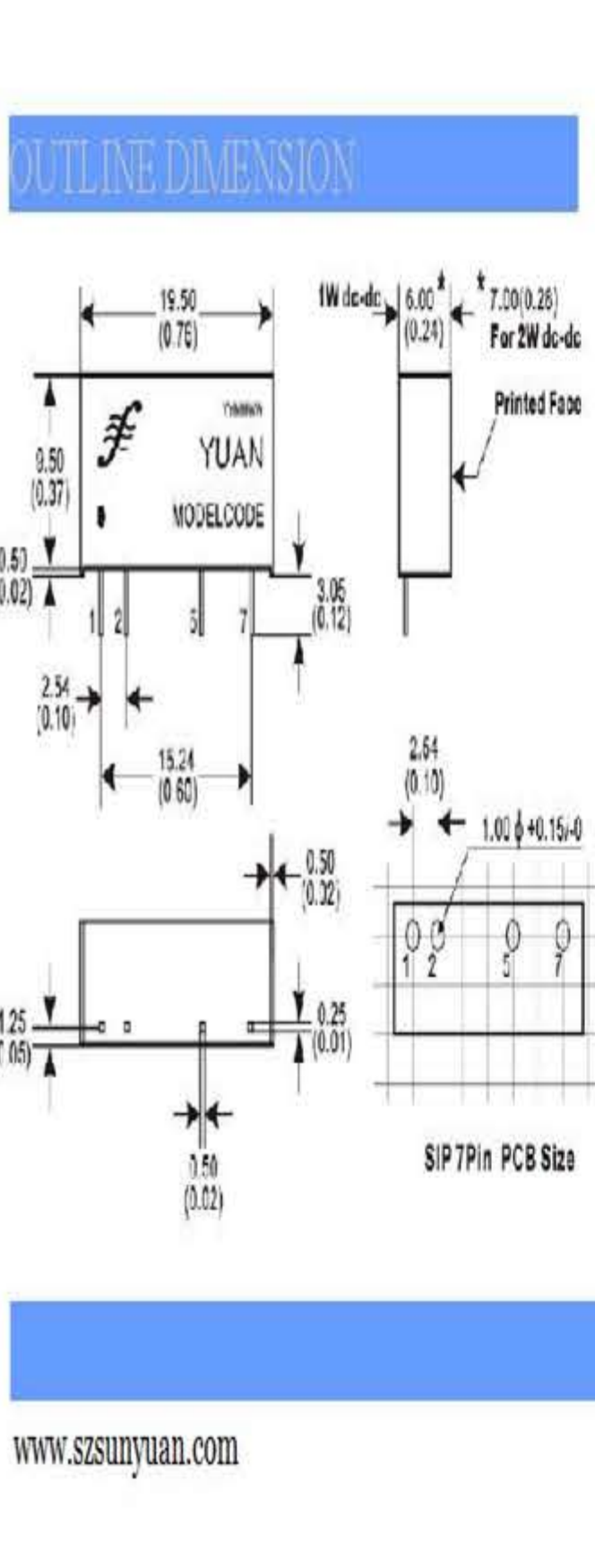


TYPICAL CONNECTION



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OUTLINE DIMENSION



PINS DESCRIPTION

Pin	Connection
1	Vin+
2	Vin-
5	GND
7	Vout+

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