

FEATURES :

- 4:1 Wide Input Voltages Range
- High Efficiency up to 88%
- Regulated Output Types
- No minimum load required
- Operating Temperature: -40°C to +80°C
- 3 Years Warranty
- Design refer to EN50155

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage Range	Nominal Input Voltage (mA TYP)		Output Voltage Range	Output Current	Efficiency
	Vdc	No-Load	Full Load	Vdc	mA	%TYP
98DW30-24S03R3NL	9-36	6	1213	3.3	7500	85
98DW30-24S05R3NL	9-36	6	1453	5	6000	86
98DW30-24S12R3NL	9-36	6	1420	12	2500	88
98DW30-24S15R3NL	9-36	6	1420	15	2000	88
98DW30-48S03R3NL	18-75	5	607	3.3	7500	85
98DW30-48S05R3NL	18-75	5	726	5	6000	86
98DW30-48S12R3NL	18-75	5	710	12	2500	88
98DW30-48S15R3NL	18-75	5	710	15	2000	88
98DW30-110S03R3NL	40-160	4	268	3.3	7500	84
98DW30-110S05R3NL	40-160	4	321	5	6000	85
98DW30-110S12R3NL	40-160	4	313	12	2500	87
98DW30-110S15R3NL	40-160	4	313	15	2000	87
98DW30-24D12R3NL	9-36	6	1420	±12	±1250	88
98DW30-24D15R3NL	9-36	6	1437	±15	±1000	87
98DW30-48D12R3NL	18-75	5	710	±12	±1250	88
98DW30-48D15R3NL	18-75	5	718	±15	±1000	87
98DW30-110D12R3NL	40-160	4	313	±12	±1250	87
98DW20-110D15R3NL	40-160	4	321	±15	±1000	85

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Surge Voltage (1 sec. max.)	24V models			50	Vdc
	48V models			100	
	110V models			170	
Input Filter	PI Type				
Reflected ripple current			30		mAp-p
Remote ON/OFF (Refer to -Vin PIN)	Positive Logic				
	ON : Open	3		12	Vdc
	OFF: Short	0		1.2	Vdc
	Input current of Ctrl PIN	0.5		0.5	mA
Remote off input current			3		mA

YUAN DEAN SCIENTIFIC



DC-DC Converter

98DW30-R3 SERIES

30Watt 3KV Isolated

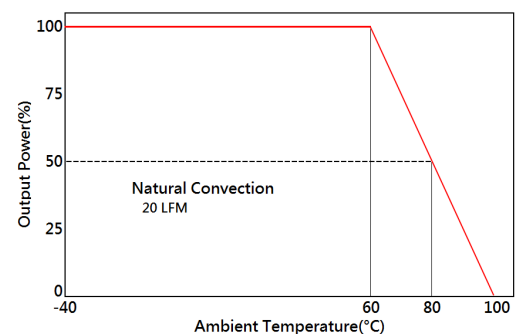
4 : 1 Input Voltage Range

Single & Dual Output

2" x 1"



Temperature Derating Graph



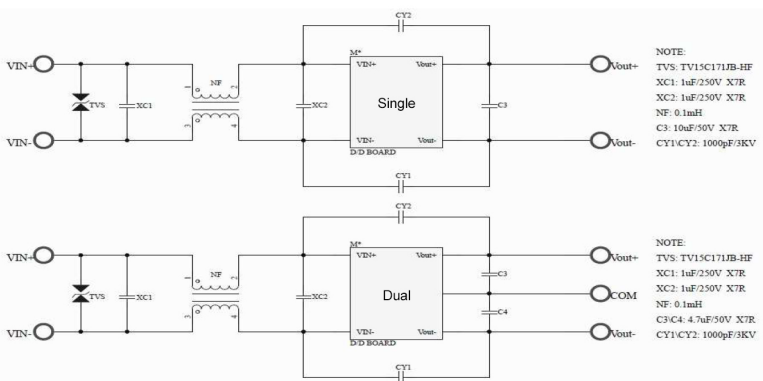
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±2	%
Short Circuit Protection	Continuous ,Auto-Recovery				
Output Power Protection	Continuous ,Auto-Recovery	120%		170	%
Over Voltage Protection	3.3Vdc	3.7		5.4	Vdc
	5Vdc	5.6		7.0	
	12Vdc	13.5		19.6	
	15Vdc	16.8		20.5	
Line Regulation	Nominal Input Voltage			±0.5	%
Load Regulation	Single output models			±0.5	%
	Dual output models			±5	
Ripple & Noise (BW=DC To 20MHz Measured with a 10uF MLCC.)	3.3V&5.0V models			75	mVp-p
	Other models			100	
Start up time	Nominal Input Voltage			30	ms
Transient response setting time	25% load step change		350		us

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage	Input To Output	3000			Vdc
	Input(Output) To Case	1600			
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		250		KHz
Operating Temperature		-40		80	°C
Storage Temperature		-55		125	°C
Case Temperature				105	°C
Humidity	Non Condensing	5		95	%
Cooling	Natural Convection (20LFM)				
Case material	Six-side shield case				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			40		g
Dimensions		51.0x25.4x13.5			mm

Recommended Test Circuit

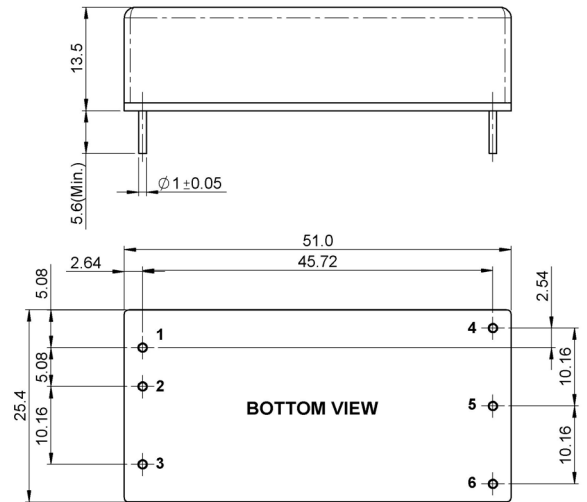


Part Number

98DW30 - 24 S 05 R 3 NL
 A B C D E F G

- A : Series
- B : Input Voltage
- C : Single(S);Dual(D)
- D : Output Voltage
- E : Regulated(R)
- F : Package
- G : RoHS Version

Dimensions



Unit : mm
 Tolerance : XX.X±0.5 , XX.XX±0.25

PIN Assignment

Pin	1	2	3	4	5	6
Single	+Vin	-Vin	Remote ON/OFF	+Vout	-Vout	Trim
Dual	+Vin	-Vin	Remote ON/OFF	+Vout	Com	-Vout