

FEATURES :

- 4:1 Wide Input Voltages Range
- High Efficiency up to 88%
- Regulated Output Types
- No minimum load required
- Operating Temperature: -40°C TO +100°C
- Industry Standard Pinout
- 3KV Isolation
- 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	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	Vdc	A	%TYP
98DW30-24S03R3NL	9-36	24	3.3	7.5	85
98DW30-24S05R3NL	9-36		5	6	86
98DW30-24S12R3NL	9-36		12	2.5	88
98DW30-24S15R3NL	9-36	48	15	2	88
98DW30-48S03R3NL	18-75		3.3	7.5	85
98DW30-48S05R3NL	18-75		5	6	86
98DW30-48S12R3NL	18-75	110	12	2.5	88
98DW30-48S15R3NL	18-75		15	2	88
98DW30-110S03R3NL	40-160		3.3	7.5	85
98DW30-110S05R3NL	40-160	24	5	6	86
98DW30-110S12R3NL	40-160		12	2.5	88
98DW30-110S15R3NL	40-160		15	2	88
98DW30-24D12R3NL	9-36	48	± 12	± 1.25	88
98DW30-24D15R3NL	9-36		± 15	± 1	88
98DW30-48D12R3NL	18-75		± 12	± 1.25	88
98DW30-48D15R3NL	18-75	110	± 15	± 1	88
98DW30-110D12R3NL	40-160		± 12	± 1.25	88
98DW30-110D15R3NL	40-160		± 15	± 1	88

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Input current at no load (Nominal input voltage)	24V models		6		mA
	48V models		5		
	110V models		4		
Surge Voltage (1 sec. max.)	24V models			50	Vdc
	48V models			100	
	110 models			170	
Input Filter	PI Type				
Reflected ripple current			30		mAp-p
Remote ON/OFF (Refer to -Vin PIN)	Positive Logic				Vdc
	ON : Open	3		12	
	OFF: Short	0		1.2	
	Input current of Ctrl PIN	0.5		0.5	mA
	Remote off input current		3		

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DC-DC Converter

98DW30-R3 SERIES

30Watt 3KV Isolated

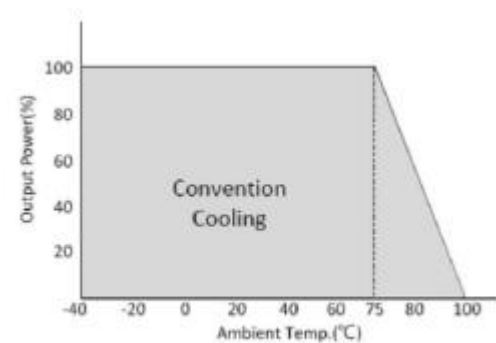
4 : 1 Input Voltage Range

Single & Dual Output

DIL



Temperature Derating Graph



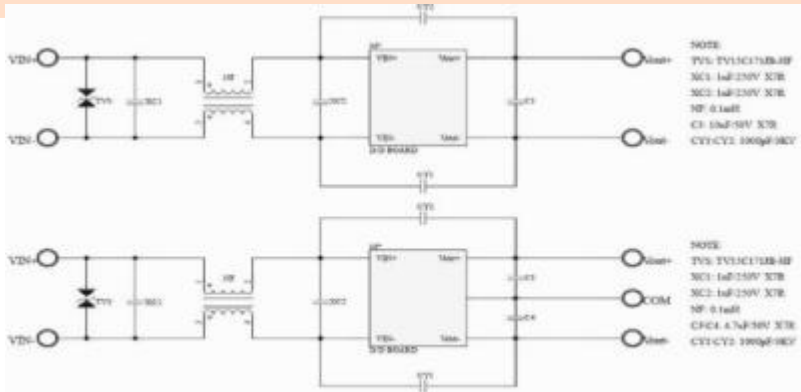
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±2	%
Short Circuit Protection	Continuous ,Auto-Recovery				
Output Power Protection	Continuous ,Auto-Recovery	110%		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	50% 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		330		KHz
Operating Temperature		-40		100	°C
Case Temperature				105	°C
Humidity	Non Condensing	5		95	%
Cooling	Free air Convection				
Case material		Six-side shield case			
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			40		g
Dimensions		51.0x25.4x13.0			mm

Recommended Test Circuit

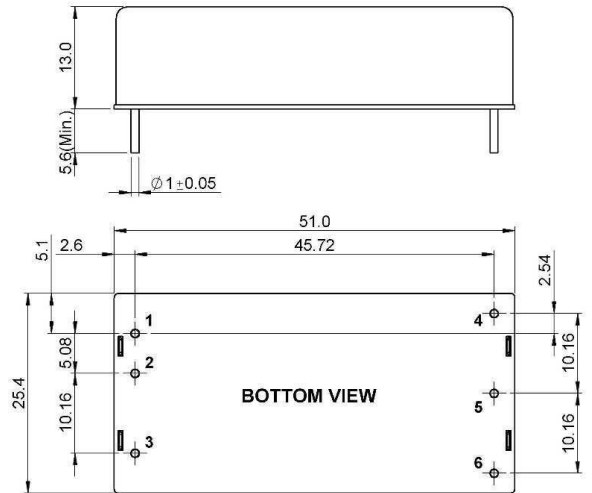


Part Number

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

Markings and dimensions



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

PIN Assignment

Pin	1	2	3	4	5	6
Single	+Vin	-Vin	Ctrl	+Vout	-Vout	Trim
Dual	+Vin	-Vin	Ctrl	+Vout	Com	-Vout

