



## 10DAW4\_1.5R Series

10W - Single/Dual Output - 4:1 Wide Input - Isolated & Regulated DC-DC Converter

### DC-DC Converter

10 Watt

- ⊕ 10W DIL Package
- ⊕ 4:1 Wide input range
- ⊕ 100% Burned in
- ⊕ High efficiency

- ⊕ UL94V-0 Package material
- ⊕ Customized solutions available
- ⊕ RoHS compliant
- ⊕ Remote Control: On/Off

The 10DAW4\_1.5R series are specially designed for applications where a wide range input voltage power supplies are isolated from the input power supply in a distributed power supply system on a circuit board.

These products apply to:

- 1) Where the voltage of the input power supply is wide range (voltage range  $\leq 4:1$ )
- 2) Where isolation is necessary between input and output (Isolation Voltage  $\leq 1500\text{VDC}$ )
- 3) Where the regulation of the output voltage and the output ripple noise are demanded



#### Common specifications

Short circuit protection:	Hiccup, automatic recovery
Cooling:	Free air convection
Operation temperature range:	-40°C ~ +100°C (with derating)
Storage temperature range:	-55°C ~ +125°C
Storage humidity range:	5 ~ 95% (non-condensing)
Case material:	Nickle-coated with non-conductive base
Potting material:	Epoxy (UL94V-0 rated)
MTBF (MIL-HDBK-217F@25°C):	3342 khours
Dimensions:	50.8x25.4x10.6 mm
Weight:	32.6g

#### Input specifications

Item	Test condition	Min	Typ	Max	Units
Voltage Types				4:1	
Input filter	Pi				

#### Isolation specifications

Item	Test condition	Min	Typ	Max	Units
Isolation voltage		1500			VDC
Isolation resistance	Test at 500VDC	1000			MΩ

#### Output specifications

Item	Test condition	Min	Typ	Max	Units
Voltage tolerance	Full load @Vin (nom)			±2	%
Line regulation				±0.5	%
Load regulation	• Single • Dual (Balance Load)			±0.5 ±1.0	% %
Cross regulation	Dual (25% to 100%)			±5	%
Transient response setting time	50% load step change		300		μs
Ripple & Noise	20MHz Bandwidth			1% of Vout	mVp-p
Switching frequency			300		KHz

#### Example:

##### 10DAW4\_2405S1.5R

10 = 10Watt; D = DIP; A = series; W4 = wide input (4:1) 24 = 9-36Vin;  
05 = 5Vout; S = single output; 1.5 = 1500VDC ; R = Revised

#### Note:

1. All specifications measured at Ta = 25°C, humidity <75%, nominal input voltage and rated output load unless otherwise specified.
2. In this datasheet, all test methods are based on our corporate standards.
3. All characteristics are for listed models, and non-standard models may perform differently. Please contact our technical support for more details.
4. Specifications of this product are subject to changes without prior notice.

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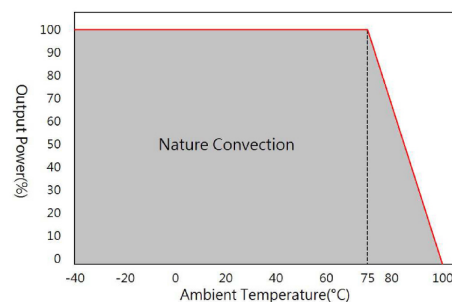
### Selection Guide

Part Number	Input Voltage [VDC]	Input Current [mA, typ]		Output Voltage [VDC]	Output Current [mA]	Capacitive load[ $\mu$ F; max.]	Efficiency [%, Typ.]
		No-Load	Full Load				
10DAW4_2403S1.5R	9-36	60	497	3.3	3000	3300	83
10DAW4_2405S1.5R	9-36	60	484	5	2000	3300	86
10DAW4_2412S1.5R	9-36	40	474	12	835	330	88
10DAW4_2415S1.5R	9-36	20	483	15	665	330	86
10DAW4_4803S1.5R	18-75	30	248	3.3	3000	5600	83
10DAW4_4805S1.5R	18-75	30	245	5	2000	5600	85
10DAW4_4812S1.5R	18-75	30	243	12	835	680	86
10DAW4_4815S1.5R	18-75	30	242	15	665	680	86

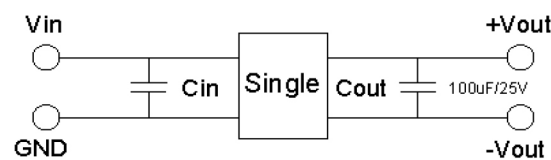
Part Number	Input Voltage [VDC]	Input Current [mA, typ]		Output Voltage [VDC]	Output Current [mA]	Capacitive load[ $\mu$ F; max.]	Efficiency [%, Typ.]
		No-Load	Full Load				
10DAW4_2405D1.5R	9-36	70	502	$\pm$ 5	$\pm$ 1000	$\pm$ 2000	83
10DAW4_2412D1.5R	9-36	40	486	$\pm$ 12	$\pm$ 418	$\pm$ 330	86
10DAW4_2415D1.5R	9-36	40	484	$\pm$ 15	$\pm$ 333	$\pm$ 330	86
10DAW4_4805D1.5R	18-75	30	251	$\pm$ 5	$\pm$ 1000	$\pm$ 3300	83
10DAW4_4812D1.5R	18-75	30	243	$\pm$ 12	$\pm$ 418	$\pm$ 220	86
10DAW4_4815D1.5R	18-75	30	242	$\pm$ 15	$\pm$ 333	$\pm$ 220	86

### Typical characteristics

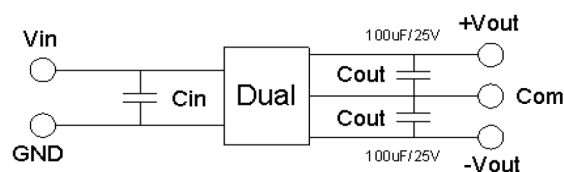
Temperature Derating Graph



### Recommended circuit



24V&48V: Cin 10uF,100V

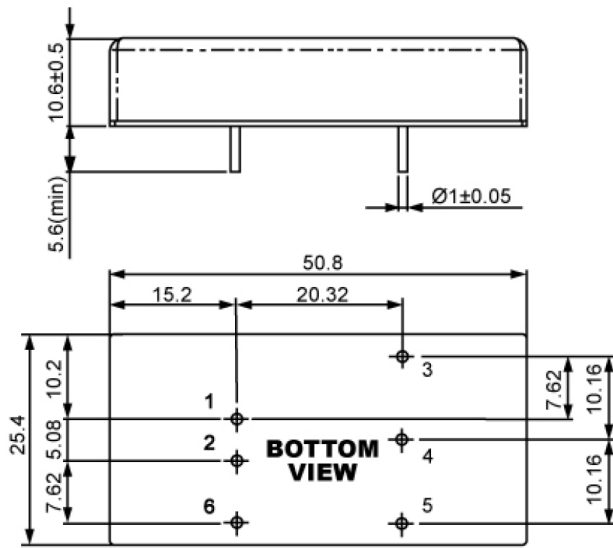


24V & 48V :Cin 10uF,100V

## 10DAW4\_1.5R Series

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### Mechanical dimensions



UNIT : mm

Tolerances : XX.X ± 0.5, XX.XX ± 0.25

PIN Connection						
Pin	1	2	3	4	5	6
Single	+Vin	-Vin	+Vout	Trim	-Vout	Remote On/Off
Dual	+Vin	-Vin	+Vout	Com	-Vout	Remote On/Off

**Note:**

Unit: mm

Tolerances: XX.X ± 0.50mm / XX.XX ± 0.25mm