



## 15DAWE\_1.5R series

15W - Single/Dual Output DC-DC Converter - Isolated & Regulated

### DC-DC Converter

15 Watt

- ⊕ 15 Watt package
- ⊕ 2:1 wide input voltage
- ⊕ 100% burned in
- ⊕ High efficiency to 86%
- ⊕ Customized solutions available

- ⊕ Remote control: On/Off
- ⊕ UL94V-0 package material
- ⊕ Operating temperature: -40°C to +85°C

Introducing our latest our 15DAWE\_1.5R series with a 2:1 wide input voltage range. This product boasts high efficiency up to 86% and has been 100% burned in to ensure reliability. It features remote control functionality (On/Off) and is made from UL94V-0 compliant material. Operating smoothly in temperatures from -40°C to +85°C, it also offers customized solutions to meet specific needs.



Common specifications	
Short circuit protection	Hiccup, automatic recovery
Operation temperature	-40°C ~+85°C (With derating)
Storage temperature	-55°C ~+125°C
Humidity	5~95 %RH (Non Condensing)
MTBF: (MIL-HDBK-217F@25°C)	2.318x10 <sup>6</sup> Hours
Case material	Nickel coated copper with no-conductive base
Switching frequency	300 KHz
Dimensions	50.8 x 25.4 x 10.6 mm
Weight	32.6 g
Cooling	Natural Convection (20LFM)

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% Load)			±5	%	
Ripple & noise*	• Output:3-15V TYPES BW=DC To 20MHz • Output > 15V TYPES BW=DC To 20MHz			100 1% of Vout	mVp-p	
Transient response setting time	25% load step change		300		us	

Input specifications						
Item	Test condition	Min	Typ	Max	Units	
Voltage types				2:1		
Input filter	Pi TYPE					

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

#### Example:

#### 15DAWE\_1205D1.5R

15 = 15Watt; D = DIP; A = Series; W = Wide input; E = cost effective; 12 = 12Vin; 05 = 5Vout; D = Dual Output; 1.5 = 1500VDC isolation; R = Regulated output

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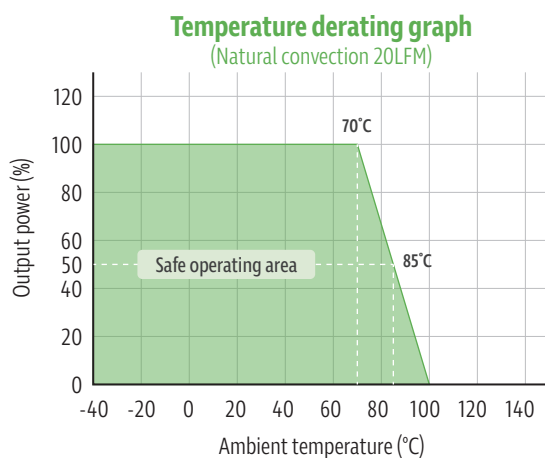
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### Product Selection Guide - Single output

Approval	Model	Input Voltage (VDC)	Input Current (mA) Typ. No-load	Input Current (mA) Typ. Full load	Output Voltage (VDC)	Output Current (mA) Full load	Full Load Efficiency (%) Typ.	Capacitive Load ( $\mu$ F) Max.
	15DAWE_1203S1.5R	9-18	70	1310	3.3	4000	84	1500
	15DAWE_1205S1.5R	9-18	70	1453	5	3000	86	1500
	15DAWE_1212S1.5R	9-18	30	1453	12	1250	86	120
	15DAWE_1215S1.5R	9-18	30	1453	15	1000	86	120
	15DAWE_2403S1.5R	18-36	70	655	3.3	4000	84	3300
	15DAWE_2405S1.5R	18-36	70	727	5	3000	86	3300
	15DAWE_2412S1.5R	18-36	30	727	12	1250	86	330
	15DAWE_2415S1.5R	18-36	30	727	15	1000	86	330
	15DAWE_4803S1.5R	36-75	40	327	3.3	4000	84	5600
	15DAWE_4805S1.5R	36-75	40	363	5	3000	86	5600
	15DAWE_4812S1.5R	36-75	30	363	12	1250	86	680
	15DAWE_4815S1.5R	36-75	30	363	15	1000	86	680

Approval	Model	Input Voltage (VDC)	Input Current (mA) Typ. No-load	Input Current (mA) Typ. Full load	Output Voltage (VDC)	Output Current (mA) Full load	Full Load Efficiency (%) Typ.	Capacitive Load ( $\mu$ F) Max.
	15DAWE_1205D1.5R	9-18	70	1488	$\pm$ 5	$\pm$ 1500	84	$\pm$ 1000
	15DAWE_1212D1.5R	9-18	30	1454	$\pm$ 12	$\pm$ 625	86	$\pm$ 120
	15DAWE_1215D1.5R	9-18	30	1454	$\pm$ 15	$\pm$ 500	86	$\pm$ 120
	15DAWE_2405D1.5R	18-36	70	744	$\pm$ 5	$\pm$ 1500	84	$\pm$ 2000
	15DAWE_2412D1.5R	18-36	30	727	$\pm$ 12	$\pm$ 625	86	$\pm$ 330
	15DAWE_2415D1.5R	18-36	30	727	$\pm$ 15	$\pm$ 500	86	$\pm$ 330
	15DAWE_4805D1.5R	36-75	40	372	$\pm$ 5	$\pm$ 1500	84	$\pm$ 3300
	15DAWE_4812D1.5R	36-75	30	368	$\pm$ 12	$\pm$ 625	85	$\pm$ 220
	15DAWE_4815D1.5R	36-75	30	368	$\pm$ 15	$\pm$ 500	85	$\pm$ 220

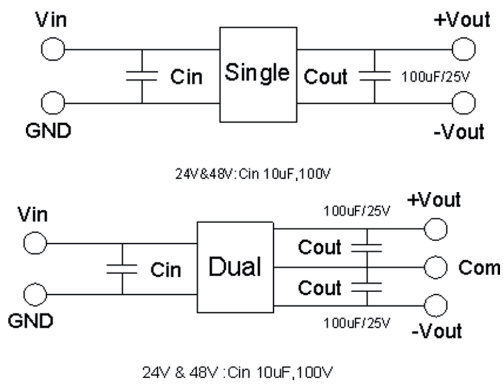
### Typical characteristics



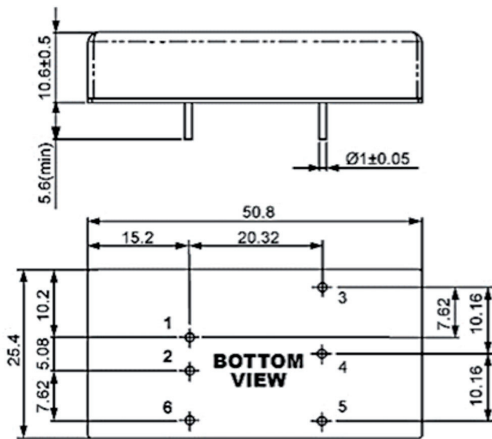
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### Recommended test Circuit



### Mechanical dimensions



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

UNIT : mm  
Tolerances : XX.X ± 0.5, XX.XX ± 0.25