

AV10 Series Single Output

Common Specs

Input	Min	Nom	Max	Units	Notes	
Input Voltage	9	12	18	Vdc	25 Vdc max < 100 ms	
	18	24	36	Vdc	50 Vdc max < 100 ms	
	36	48	72	Vdc	100 Vdc max < 100 ms	
Isolation						
	Input-Output	500		Vdc		
	Input-Case	500		Vdc		
	Output-Case	500		Vdc		
I/O Isolation Resistance	300			MΩ		
Output	Min	Nom	Max	Units	Notes	
Power		10		W		
Voltage Setpoint Accuracy			±1	%Vo	±2% Vo for 3.3V Outputs	
Line Regulation			±0.2	%Vo		
Load Regulation			±0.5	%Vo	±1% Vo for 3.3V Outputs	
Dynamic Response						
	50-75% load			5	%Vo	T=25°C, DI/Dt=1A/10μs
				200	μs	T=25°C, DI/Dt=1A/10μs
	50-25% load			5	%Vo	T=25°C, DI/Dt=1A/10μs
			200	μs	T=25°C, DI/Dt=1A/10μs	
Temperature Regulation			±0.02	%Vo/°C		
General	Min	Nom	Max	Units	Notes	
MTBF		3,730		k Hrs	Bellcore TR332, 25°C	
Case Temperature	-25		95	°C		
Storage Temperature	-40		105	°C		
Switching Frequency		330		kHz		
Pin solder temperature			260	°C	wave solder < 15 s	
Hand Soldering Time			5	s	iron temperature 450°C	
Weight		24		grams		

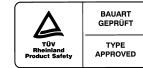
More Choices in DC-DC Converters

	AM10	AVS10	AV20	AV25	AVS25	AV30	AW30	AVH-S	AVH-D	AVE
Power (W)	10	10	20	25	25	30	30	50-150	75	50-150
Inputs (V)	5	5	24, 48	24, 48	48	24, 48	24, 48	48	48	48
Outputs	1	1	1, 2	1, 2	3	2, 3	1	1	1	1
Isolation	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Size	1"x1"	1"x2"	1.6 x2"	2"x2.56"	2.4"x2.8"	2.5"x3"	2.6"x3.1"	2.28"x2.4"	2.28"x2.4"	2.28"x2.4"



Features

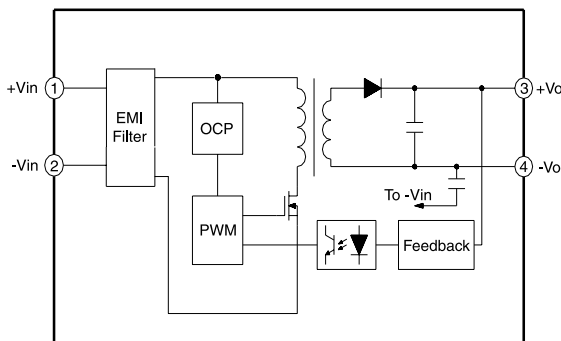
- 10 watts of output power
- Industry Standard 1" x 2" Footprint
- Low profile
- 2:1 input range
- Isolated Output
- Overcurrent Protection



Electrical Specifications

	Nominal Input (V)	Output Voltage (V)	Output Current (A)	Ripple (mV rms)		Noise (mV pp)		Efficiency (%)	
				typ	max	typ	max	min	typ
AV10-12S03	12	3.3	2.5	7	20	40	75	75	76
AV10-12S05	12	5	2	7	20	40	75	77	78
AV10-12S12	12	12	0.84	10	20	30	75	81	82
AV10-12S15	12	15	0.67	10	20	30	75	81	82
AV10-24S03	24	3.3	2.5	7	20	40	75	75	76
AV10-24S05	24	5	2	7	20	40	75	77	78
AV10-24S08	24	8	1.2	10	20	30	75	81	82
AV10-24S12	24	12	0.84	10	20	30	75	81	82
AV10-24S15	24	15	0.67	10	20	30	75	81	82
AV10-48S03	48	3.3	2.5	7	20	40	75	75	77
AV10-48S05	48	5	2	7	20	40	75	77	80
AV10-48S08	48	8	1.2	10	20	30	75	81	82
AV10-48S12	48	12	0.84	10	20	30	75	81	82
AV10-48S15	48	15	0.67	10	20	30	75	81	82

Remote control function and Trim function are available for 12V input module by adding /C for remote control and /T for Trim on the end of part number. No pin for 24V and 48V input and if not ordered for 12V input.



AV10 Series Single Output Functional Block Diagram

