

## Wide Input Voltage Range 6 Watt Dc-Dc Converter

### FEATURES:

2:1 Wide Input Voltage.

Efficiency To 87%

PI Input Filter.

1500Vdc Isolation

MTBF:>1,500,000 hrs

Operating Temperature:-40°C TO +85°C

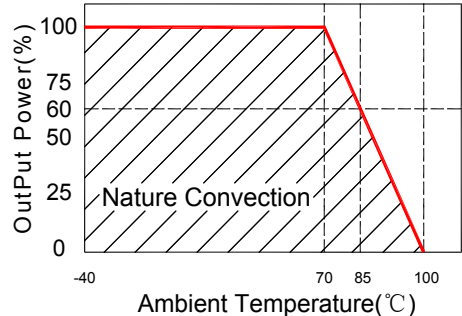
Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified						
Part Number	Input Voltage	Output Voltage	Output Current	Input Current		Efficiency
				NO LOAD	FULL LOAD	
	Vdc	Vdc	mA	mA	mA	%TYP
AS6R-12S05RSCF	9-18	5	1200	7.5	625	80
AS6R-12S12RSCF	9-18	12	500	7.5	625	80
AS6R-12S15RSCF	9-18	15	400	7.5	625	80
AS6R-12D05RSCF	9-18	±5	±600	12	625	80
AS6R-12D12RSCF	9-18	±12	±250	12	600	83
AS6R-12D15RSCF	9-18	±15	±200	12	600	83
AS6R-24S05RSCF	18-36	5	1200	5	305	82
AS6R-24S12RSCF	18-36	12	500	5	287	87
AS6R-24S15RSCF	18-36	15	400	5	287	87
AS6R-24S24RSCF	18-36	24	250	5	287	87
AS6R-24D05RSCF	18-36	±5	±600	7.5	310	80
AS6R-24D12RSCF	18-36	±12	±250	7.5	295	85
AS6R-24D15RSCF	18-36	±15	±200	7.5	295	85
AS6R-48S05RSCF	36-75	5	1200	2	155	80
AS6R-48S12RSCF	36-75	12	500	2	145	85
AS6R-48S15RSCF	36-75	15	400	2	145	85
AS6R-48S24RSCF	36-75	24	250	2	145	85
AS6R-48D05RSCF	36-75	±5	±600	3	155	80
AS6R-48D12RSCF	36-75	±12	±250	3	145	85

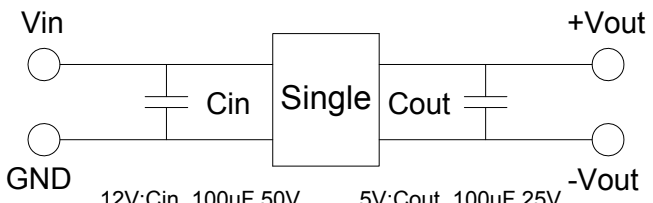
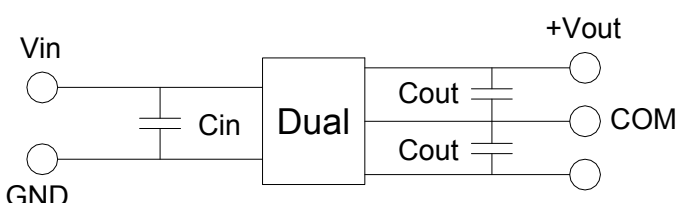
Input Specifications						
Parameters	Conditions	Min	Typ	Max	Units	
Voltage Types				2:1		
Filter	Capacitor					

Output Specifications						
Parameters	Conditions	Min	Typ	Max	Units	
Voltage Tolerance				±2	%	
Short Circuit Protection	Continuous					
Line Regulation				±0.5	%	
Load Regulation	Single (F.L To 10% Load)			±0.8	%	
Load Regulation	Dual (F.L To 10% Load)			±1.0	%	
Ripple & Noise	BW=DC To 20MHz			100	mVp-p	
Transient response setting time	50% load step change		350		us	

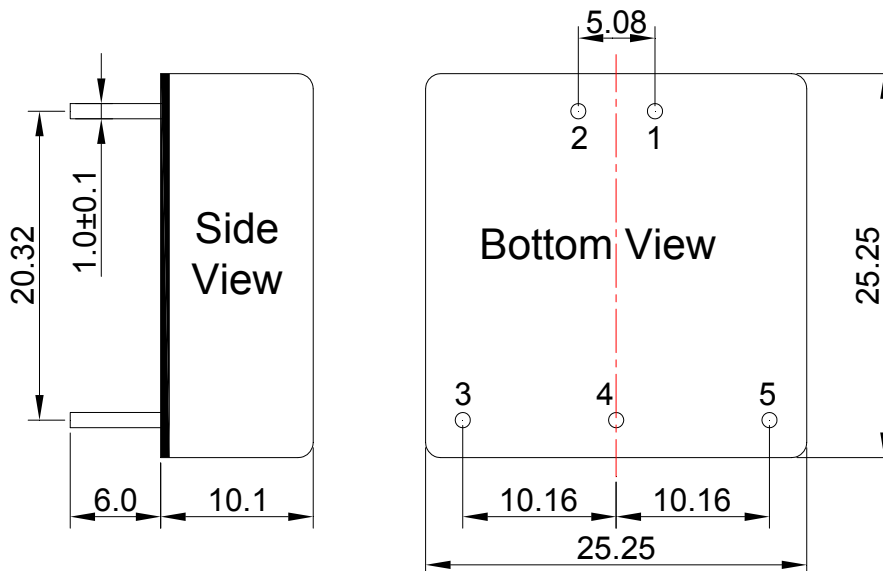
General Specifications						
Parameters	Conditions	Min	Typ	Max	Units	
Isolation Resistance	500Vdc	1000			MΩ	
Switching Frequency			200		KHz	
Operating Temperature		-40		85	°C	
Humidity	Non Condensing			95	%	
Cooling	Free air Convection					
Case material	Nickel Coated Copper With Non-Conductive Base					
Weight			15.0		g	
Dimensions			25.25x25.25x10.1		mm	

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Temperature Derating Graph	Part Number
	<p><b>AS6R-12-S-05-RS-C-F</b></p> <p style="text-align: center;">1    2 3 4    5 6 7</p> <p>1:Series 2:Input Voltage 3:Single Output 4:Output Voltage 5:Case 25.25x25.25x10.1 6:Short Circuit Protection Continuous 7:Efficiency &gt; 85%</p>

Recommended Test Circuit															
 <p style="text-align: center;"><b>Single</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">12V:Cin 100uF,50V</td> <td style="width: 50%;">5V:Cout 100uF,25V</td> </tr> <tr> <td>24V:Cin 10uF,100V</td> <td>12V:Cout 100uF,25V</td> </tr> <tr> <td>48V:Cin 10uF,100V</td> <td>15V:Cout 100uF,50V</td> </tr> <tr> <td></td> <td>24V:Cout 10uF,100V</td> </tr> </table>	12V:Cin 100uF,50V	5V:Cout 100uF,25V	24V:Cin 10uF,100V	12V:Cout 100uF,25V	48V:Cin 10uF,100V	15V:Cout 100uF,50V		24V:Cout 10uF,100V	 <p style="text-align: center;"><b>Dual</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">12V:Cin 100uF,50V</td> <td style="width: 50%;">5V:Cout 100uF,25V</td> </tr> <tr> <td>24V:Cin 10uF,100V</td> <td>12V:Cout 100uF,25V</td> </tr> <tr> <td>48V:Cin 10uF,100V</td> <td>15V:Cout 100uF,50V</td> </tr> </table>	12V:Cin 100uF,50V	5V:Cout 100uF,25V	24V:Cin 10uF,100V	12V:Cout 100uF,25V	48V:Cin 10uF,100V	15V:Cout 100uF,50V
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Markings and dimensions



UNIT: mm Unless otherwise specified, all tolerances are  $\pm 0.25$

PIN Connection					
PIN	1	2	3	4	5
SINGLE	+Vin	-Vin	-Vout	No Pin	+Vout
DUAL	+Vin	-Vin	-Vout	COM	+Vout