

**DC-DC Astra**  
**AS5R-xxSxxZC**  
**AS5R-xxDxxZC**

ООО Компания “Элемент”



**Wide Input Voltage Range 5 Watt Dc-Dc Converter**

**FEATURES:**

2:1 Wide Input Voltage.

5-6 Watt 24PIN DIL Package.

Efficiency To 80%

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	
				mA	mA	
	Vdc	Vdc	mA	mA	mA	%TYP
AS5R-12S03ZC	9-18	3.3	1000	7.5	405	70
AS5R-12S05ZC	9-18	5	1000	7.5	545	75
AS5R-12S12ZC	9-18	12	470	7.5	585	80
AS5R-12S15ZC	9-18	15	400	7.5	625	80
AS5R-12D05ZC	9-18	±5	±500	12	545	75
AS5R-12D12ZC	9-18	±12	±230	12	575	80
AS5R-12D15ZC	9-18	±15	±190	12	590	80
AS5R-24S03ZC	18-36	3.3	1000	5	195	70
AS5R-24S05ZC	18-36	5	1000	5	265	80
AS5R-24S12ZC	18-36	12	470	5	285	80
AS5R-24S15ZC	18-36	15	400	5	305	80
AS5R-24D05ZC	18-36	±5	±500	7.5	265	80
AS5R-24D12ZC	18-36	±12	±230	7.5	285	80
AS5R-24D15ZC	18-36	±15	±190	7.5	295	80
AS5R-48S03ZC	36-72	3.3	1000	2	98	70
AS5R-48S05ZC	36-72	5	1000	2	133	80
AS5R-48S12ZC	36-72	12	470	2	145	80
AS5R-48S15ZC	36-72	15	400	2	154	80
AS5R-48D05ZC	36-72	±5	±500	3	265	80
AS5R-48D12ZC	36-72	±12	±230	3	142	80

**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
<b>Voltage Types</b>				2:1	
<b>Filter</b>	Capacitor				

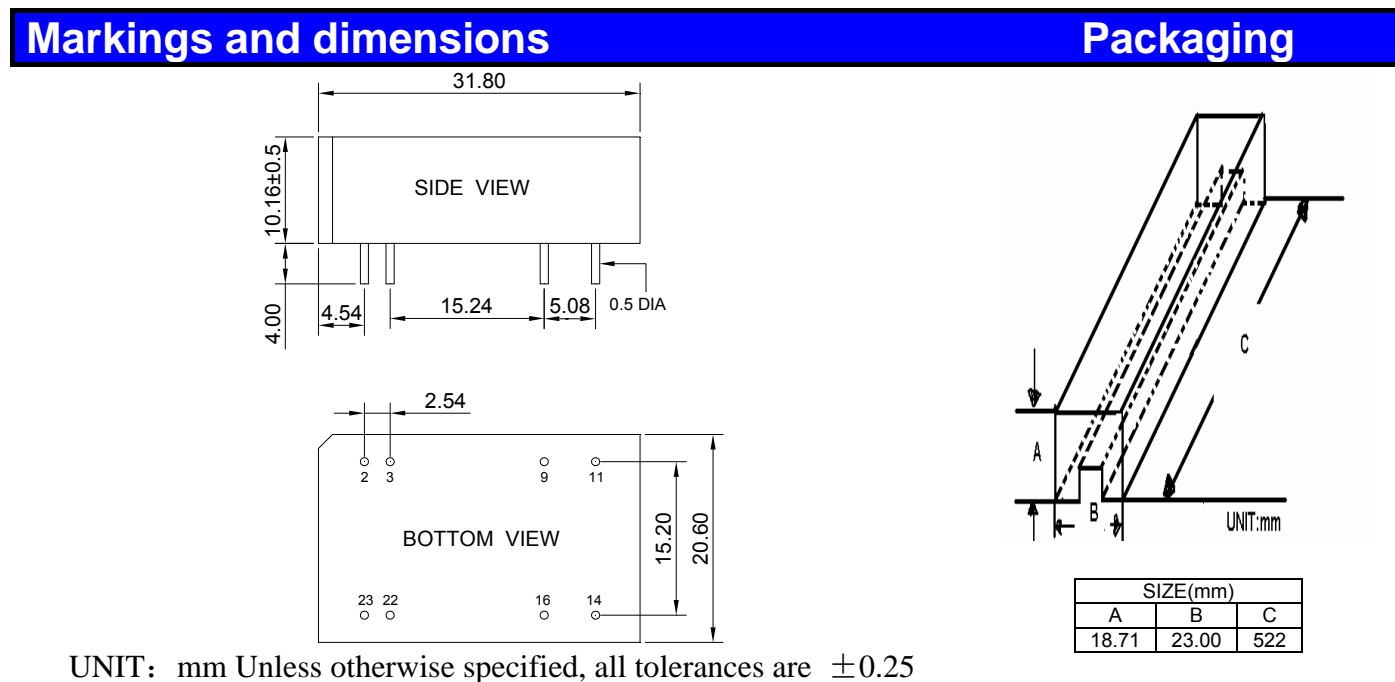
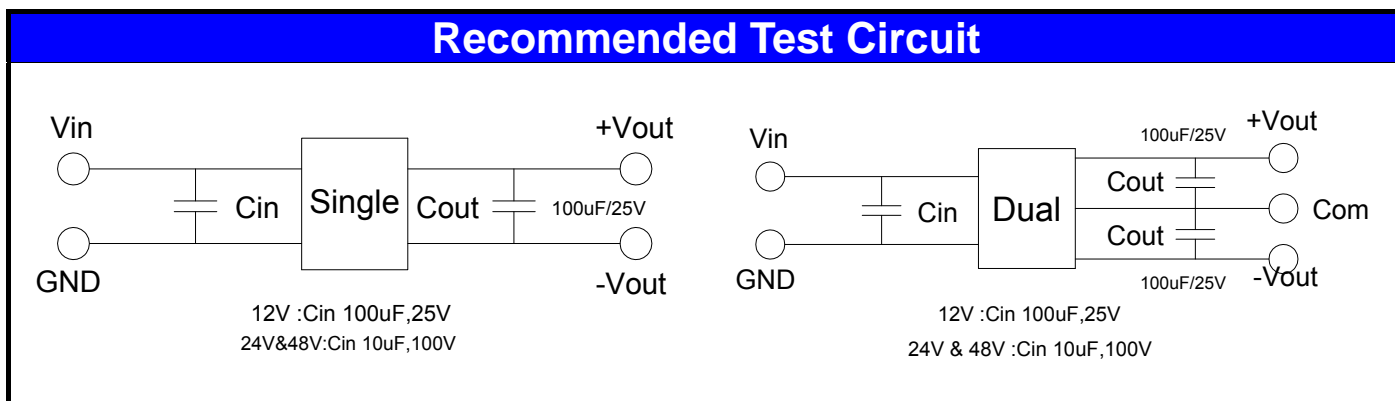
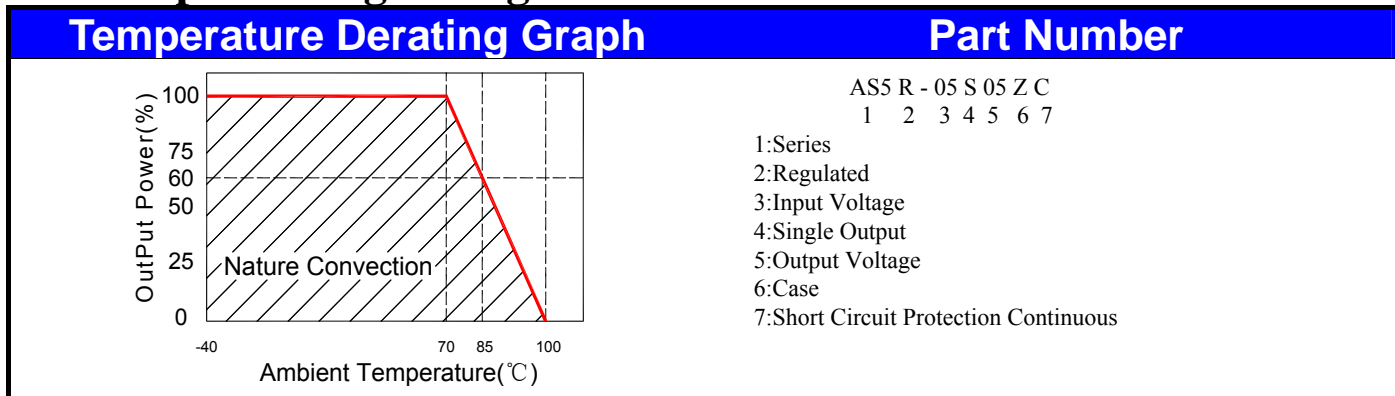
**Output Specifications**

Parameters	Conditions	Min	Typ	Max	Units
<b>Voltage Tolerance</b>				±2	%
<b>Short Circuit Protection</b>	Continuous				
<b>Line Regulation</b>				±0.5	%
<b>Load Regulation</b>	Single (F.L To 10% Load)			±0.5	%
<b>Load Regulation</b>	Dual (F.L To 1/4 Load)			±1.0	%
<b>Ripple &amp; Noise</b>	BW=DC To 20MHz			100	mVp-p
<b>Transient response setting time</b>	50% load step change		350		us

**General Specifications**

Parameters	Conditions	Min	Typ	Max	Units
<b>Isolation Resistance</b>	500Vdc	1000			MΩ
<b>Switching Frequency</b>			200		KHz
<b>Operating Temperature</b>		-40		85	°C
<b>Humidity</b>	Non Condensing			95	%
<b>Cooling</b>	Free air Convection				
<b>Case material</b>	Nickel Coated With Non-Conductive Base or Black Coated Copper With Non-Conductive Base				
<b>Weight</b>			16.2		g
<b>Dimensions</b>			31.80x20.60x10.16		mm

Wide Input Voltage Range 5-6 Watt Dc-Dc Converter



PIN Connection						
PIN	2.3	9	11	14	16	22.23
SINGLE	-Vin	NO PIN	NC	+Vout	-Vout	+Vin
DUAL	-Vin	COM	-Vout	+Vout	COM	+Vin