

DC-DC Astra
AS3R-xxSxxNC
AS3R-xxDxxNC



Wide Input Voltage Range 3 Watt Dc-Dc Converter

FEATURES:

- 2:1 Wide Input Voltage.
- 3 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	Efficiency
	Vdc	Vdc	mA	%TYP
AS3R-05S05NC	4.5-9	5	600	75
AS3R-05S12NC	4.5-9	12	250	80
AS3R-05S15NC	4.5-9	15	200	80
AS3R-12S05NC	9-18	5	600	75
AS3R-12S12NC	9-18	12	250	80
AS3R-12S15NC	9-18	15	200	80
AS3R-12D05NC	9-18	±5	±300	75
AS3R-12D12NC	9-18	±12	±125	75
AS3R-12D15NC	9-18	±15	±100	75
AS3R-24S05NC	18-36	5	600	75
AS3R-24S12NC	18-36	12	250	80
AS3R-24S15NC	18-36	15	200	80
AS3R-24D05NC	18-36	±5	±300	75
AS3R-24D12NC	18-36	±12	±125	80
AS3R-24D15NC	18-36	±15	±100	80
AS3R-48S05NC	36-72	5	600	75
AS3R-48S12NC	36-72	12	250	80
AS3R-48S15NC	36-72	15	200	80
AS3R-48D05NC	36-72	±5	±300	75
AS3R-48D12NC	36-72	±12	±125	80
AS3R-48D15NC	36-72	±15	±100	80

Input Specifications

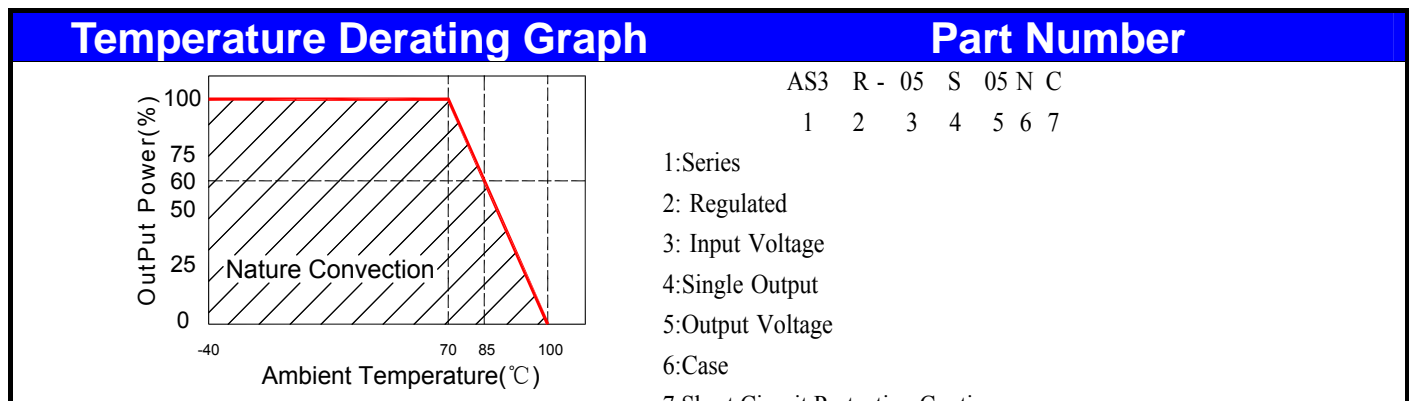
Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter	Capacitor				

Output Specifications

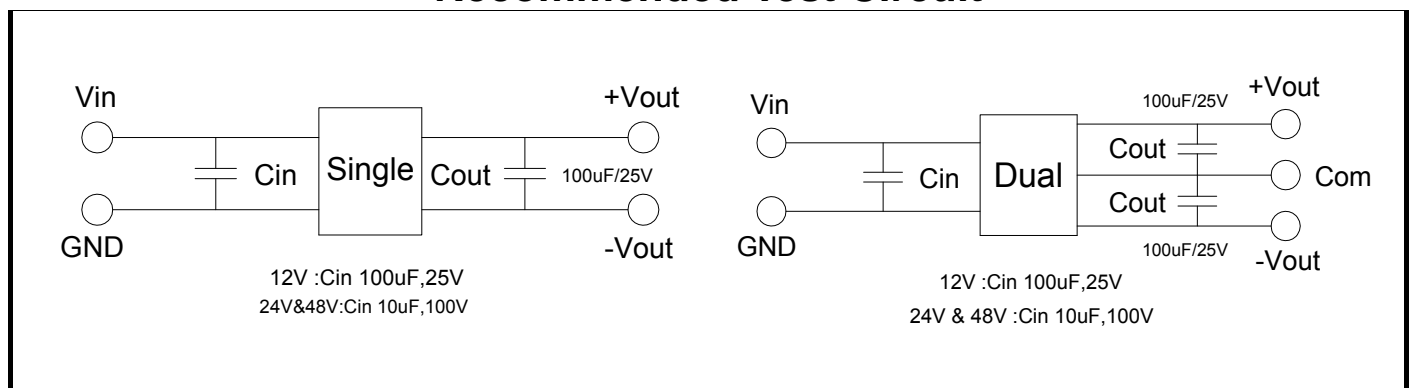
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous				
Line Regulation				±0.5	%
Load Regulation	SINGLE			±0.5	%
Load Regulation	DUAL			±2.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

General Specifications

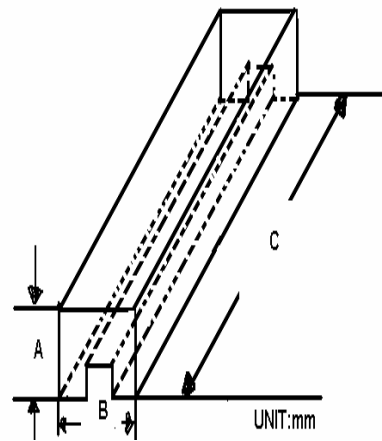
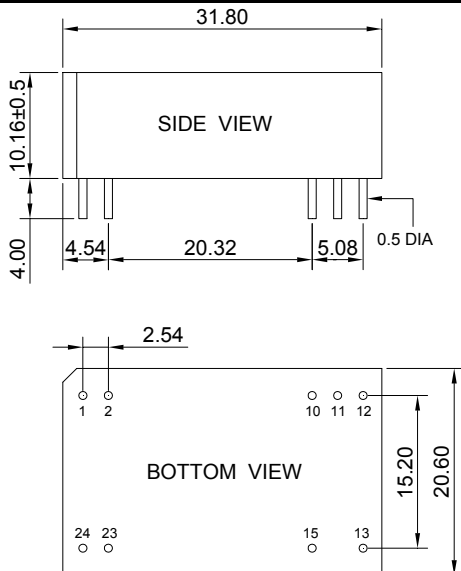
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			200		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated With Non-Conductive Base or Black Coated Copper With Non-Conductive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



Recommended Test Circuit



Markings and dimensions	Packaging
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SIZE(mm)		
A	B	C
18.71	23.00	522

UNIT: mm Unless otherwise specified, all tolerances are ± 0.25

PIN Connection						
PIN	1.2	10.11	12	13	15	23.24
SINGLE	+Vin	NO PIN	-Vout	+Vout	NO PIN	-Vin
DUAL	+Vin	COM	NO PIN	-Vout	+Vout	-Vin