

## 1000Vdc Isolation 1 Watt Single Output Surface Mount Dc-Dc Converter

### FEATURES:

Small Footprint

14PIN SMD Package

High Efficiency up to 80%

Unregulated Output Types

High Power Density No External Component Required Operating

Temperature:-40°C TO +85°C Industry Standard Pinout

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Output Voltage	Output Current	Efficiency
	Vdc	mA	% TYP
AS1N-XXS03O	3.3	303	65
AS1N-XXS05O	5	200	70
AS1N-XXS09O	9	110	75
AS1N-XXS12O	12	84	78
AS1N-XXS15O	15	67	80

Note:1."XX" Is Input Voltage:03=3.3Vdc,05=5Vdc,09=9Vdc,12=12Vdc,15=15Vdc.

2. The input voltage increases, there will be an increase in efficiency.

### Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			±5	%
Filter	Capacitor				

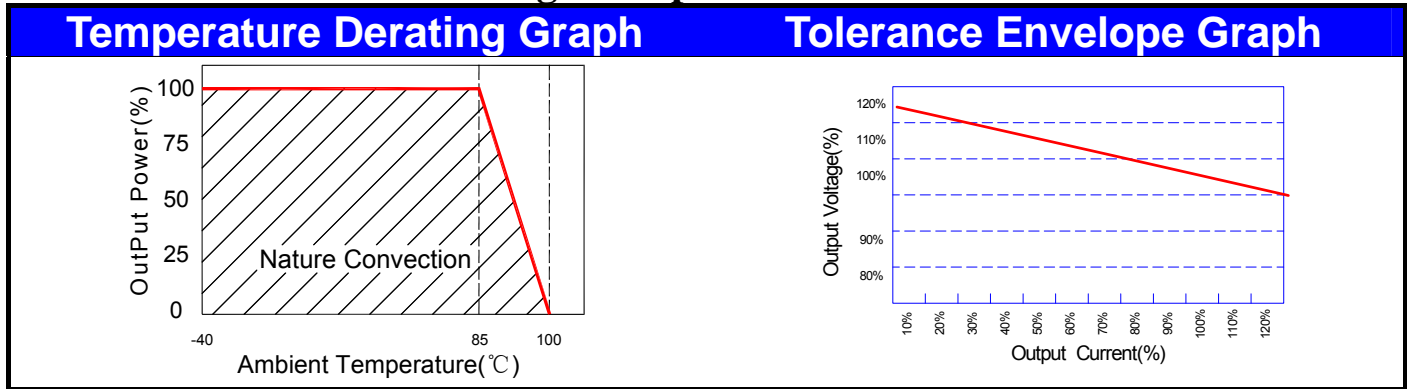
### Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±5	%
Short Circuit Protection	Short Term			1 Sec	
Line Regulation	For 1.0% OF Vin		1.2		%
Load Regulation	3.3V(10% To 100% F.L)		15		%
Load Regulation	5V,9V(10% To 100% F.L)			15&9.0	%
Load Regulation	12V,15 V(10% To 100% F.L)			7.5&7.0	%
Ripple & Noise	BW=DC To 20MHZ			100	mVp-p
Transient response setting time	50% load step change		350		us

### General Specifications

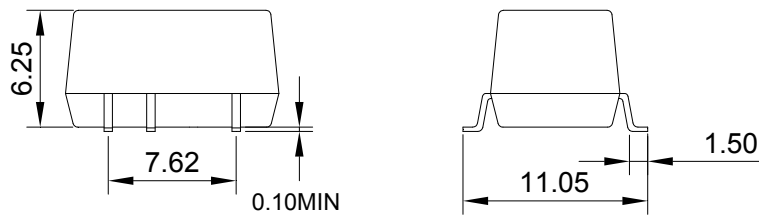
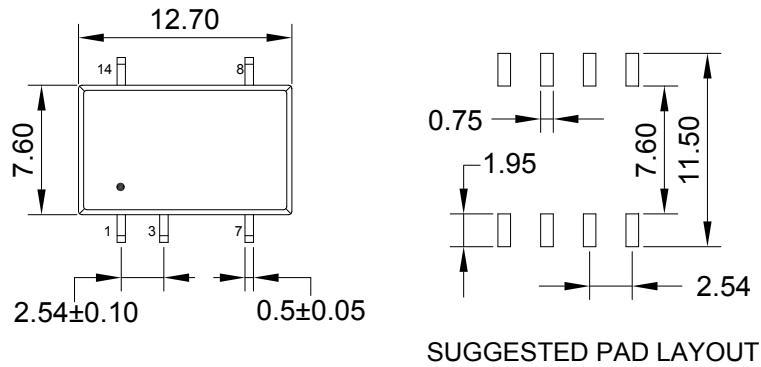
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		100		KHz
Operating Temperature		-40		+85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	3500000			Hours
Weight			1.0		g
Dimensions			12.7X7.6X6.25		mm

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Recommended Test Circuit	Part Number
<p>                     3.3V:Cin 4.7uF,25V 3.3V :Cout 22uF,16V                      5V :Cin 4.7uF,25V 5V :Cout 10uF,25V                      9V :Cin 4.7uF,25V 9V :Cout 4.7uF,25V                      12V:Cin 2.2uF,25V 12V:Cout 2.2uF,25V                      15V:Cin 1uF,50V 15V:Cout 1uF,50V                 </p>	<p>AS1 N - 05 D 05 O</p> <p>1 2 3 4 5 6</p> <p> <b>1:Series</b>  <b>2:Input Voltage</b>  <b>3: Dual separated Output</b>  <b>4: Output voltage</b>  <b>5: Case J 20.32x10.16x6.80</b>  <b>6 Case K 20.32x10.16x7.70 .</b> </p>

Markings and Dimensions



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

PIN Connection					
Pin	1	3	7	8	14
Single	-Vin	+Vin	-Vout	+Vout	NC