



**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
AS1-xxS03O	3.3	303	65
AS1-xxS05O	5	200	70
AS1-xxS09O	9	111	75
AS1-xxS12O	12	84	78
AS1-xxS15O	15	67	80

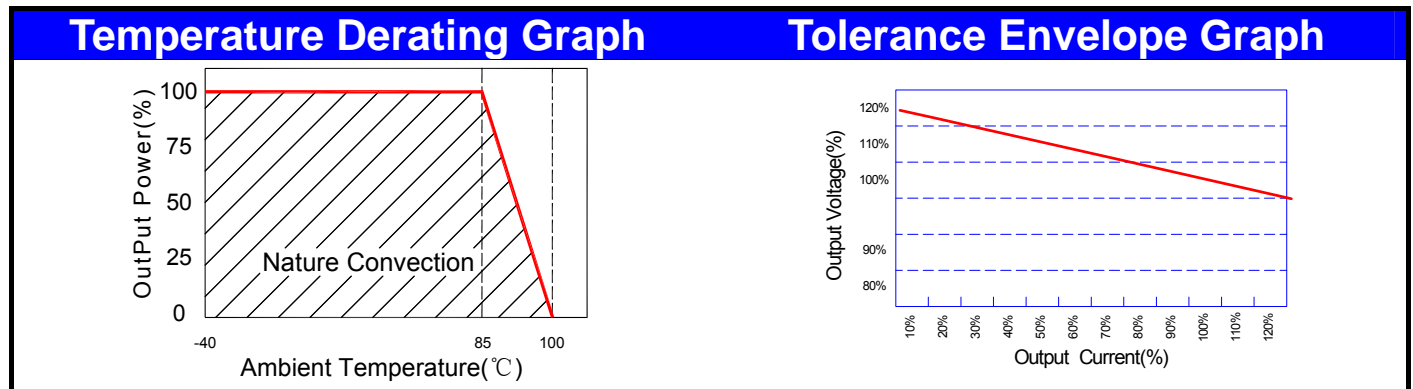
Note: 1. "XX" Is Input Voltage: 03=3.3Vdc, 05=5Vdc, 09=9Vdc, 12=12Vdc, 15=15Vdc.  
2. The input voltage increases, there will be an increase in efficiency.

Input Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			±10	%
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,15V (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

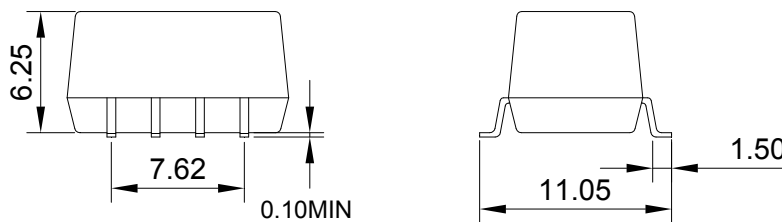
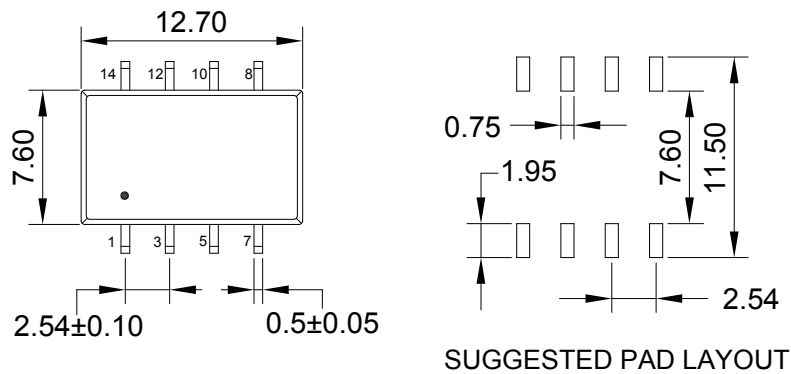
General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	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 - 05 S 05 O</p> <p>1 2 3 4 5</p> <p>1: Series 2: Input voltage 3: Single Output 4: Output voltage 5: Case 12.7x7.6x6.25</p>

Markings and Dimensions



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

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