

1000Vdc Isolation Single & Dual Output 1 Watt Dc-Dc Converter

FEATURES:

- Small Footprint
- 18PIN 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	Package Style
	Vdc	mA	% TYP	
AS1-xxS03P	3.3	303	65	P
AS1-xxS05P	5	200	70	P
AS1-xxS09P	9	112	75	P
AS1-xxS12Q	12	84	78	Q
AS1-xxS15Q	15	67	80	Q
AS1-xxD03P	±3.3	±150	65	P
AS1-xxD05P	±5	±100	70	P
AS1-xxD09P	±9	±56	75	P
AS1-xxD12Q	±12	±42	78	Q
AS1-xxD15Q	±15	±34	80	Q

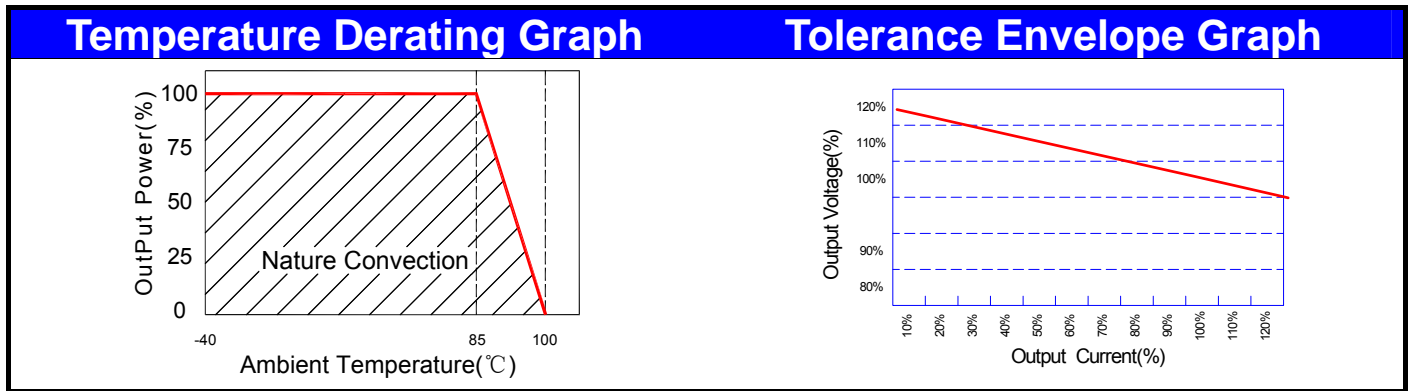
Note: 1. "XX" Is Input Voltage: 03=3.3Vdc, 05=5Vdc, 09=9Vdc, 12=12Vdc, 15=15Vdc. 2. Over 12Vdc, 15Vdc input voltage, using the Q package.
 3. The input voltage increases, there will be an increase in efficiency.

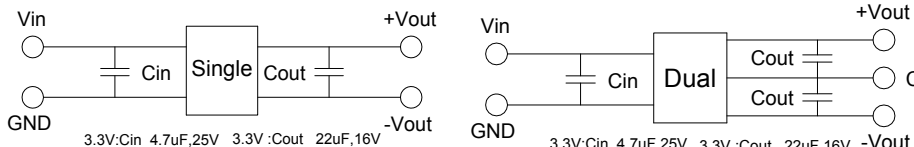
Input Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			±10	%
Filter	Capacitor				

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.)			12&8.0	%
Load Regulation	12V ,15V (10% To 100% F.L.)			8.5&7.0	%
Ripple & Noise	BW=DC To 20 MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

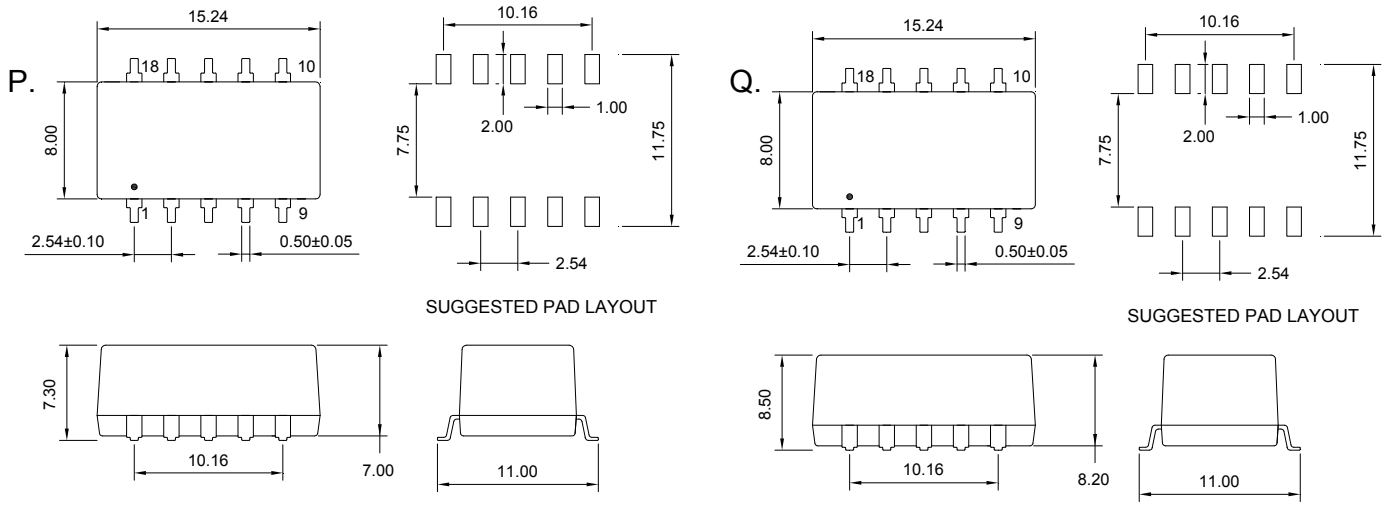
General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	3500000			Hours
Weight	Package1 or Package2		1.8		g
Dimensions	Package P		15.24x8.0x7.30		mm
Dimensions	Package Q		15.24x8.0x8.50		mm

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Recommended Test Circuit	Part Number
 <p> Single 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> Dual 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 - xx S xx P 1 2 3 4 5 1.series 2:Input Voltage 3:(D)Dual (S)Single Output 4:Output voltage 5:Case P 15.24x8.0x7.30 6Case Q 15.24x8.0x8.50</p>

Markings and dimensions



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

PIN Connection										
PIN	1	3	5	7	9	10	12	14	16	18
Single	-Vin	+Vin	NC	-Vout	-Vout	NC	+Vout	NC	NC	NC
Dual	-Vin	+Vin	NC	Com	-Vout	NC	+Vout	NC	NC	NC