



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





FEATURES

- Efficiency up to 80%
- SIP Package with Industry Standard Pinout
- Package Dimension:
3.3V&5V & 12V Models:
11.5 x6.1 x10.2mm (0.45" x0.24" x0.40")
24V Models, :
11.5 x7.1 x10.2mm (0.45" x0.28" x0.40")
- Isolation Voltage 1000VDC
- Operating Temperature range - 40°C to +85°C
- Lead free ,RoHs Compliant
- >2 MHours MTBF
- 3 Years Product Warranty



The PA01S series are miniature, SIP Package, isolated 1W DC/DC converters with 1,000VDC isolation. It offers short circuit protection and allows a wide operating temperature range of -40°C to +85°C. These isolated DC/DC converters are the latest offering from a world leader in power systems technology and manufacturing — Delta Electronics, Inc.

Model List

Model Number	Input Voltage (Range)	Output Voltage	Output Current		Input Current		Load Regulation	Maxcapacitive Load	Efficiency (typ.)
			Max.	Min.	@Max. Load	@No Load			@Max. Load
	VDC	VDC	mA	mA	mA(typ.)	mA(typ.)	% (max.)	uF	%
PA01S0303A	3.3	3.3	260	6	351	35	14	33	74
PA01S0305A	(2.97 ~ 3.63)	5	200	4	394		14		77
PA01S0503A		3.3	260	6	238		11		72
PA01S0505A	5 (4.5 ~ 5.5)	5	200	4	290	30	11	33	69
PA01S0509A		9	110	2	260		8		76
PA01S0512A		12	84	1.5	262		7		77
PA01S0515A		15	67	1	258		6		78
PA01S1205A	12 (10.8 ~ 13.2)	5	200	4	117	13	9	33	71
PA01S1209A		9	110	2	107		5		77
PA01S1212A		12	84	1.5	106		5		79
PA01S1215A		15	67	1	105		4		80
PA01S2405A	24 (21.6 ~ 26.4)	5	200	4	60	7	8	33	70
PA01S2409A		9	110	2	54		5		76
PA01S2412A		12	84	1.5	53		4		79
PA01S2415A		15	67	1	53		4		79

Input Characteristics

Item	Model	Min.	Typ.	Max.	Unit
Input Voltage Range	3.3V Input Models	2.97	3.3	3.63	VDC
	5V Input Models	4.5	5	5.5	
	12V Input Models	10.8	12	13.2	
	24V Input Models	21.6	24	26.4	
Input Surge Voltage (1 sec. max.)	3.3V Input Models	-0.7	---	6	VDC
	5V Input Models	-0.7	---	9	
	12V Input Models	-0.7	---	18	
	24V Input Models	-0.7	---	30	
Reverse Polarity Input Current	All Models	---	---	0.3	A
Input Filter		Internal Capacitor			
Internal Power Dissipation		---	---	450	mW

Output Characteristics

Item	Conditions	Min.	Typ.	Max.	Unit
Output Voltage Accuracy		---	±1.0	±3.0	%
Line Regulation	For Vin Change of 1%	---	±1.2	±1.5	%
Load Regulation	Io=20% to 100%	See Model -List			
Ripple & Noise (20MHz)		---	100	150	mV _{p-p}
Ripple & Noise (20MHz)	Over Line, Load & Temp.	---	---	200	mV _{p-p}
Ripple & Noise (20MHz)		---	---	15	mV _{rms}
Temperature Coefficient		---	±0.01	±0.02	%/°C
Short Circuit Protection		0.5 Second Max.			

General Characteristics

Item	Conditions	Min.	Typ.	Max.	Unit
I/O Isolation Voltage (rated)	60 Seconds	1000	---	---	VDC
I/O Isolation Resistance	500 VDC	1000	---	---	MΩ
I/O Isolation Capacitance	100KHz, 1V	---	60	100	pF
Switching Frequency		50	90	110	KHz
MTBF (calculated)	@25°C, Ground Benign	2,000,000	-----	-----	Hours

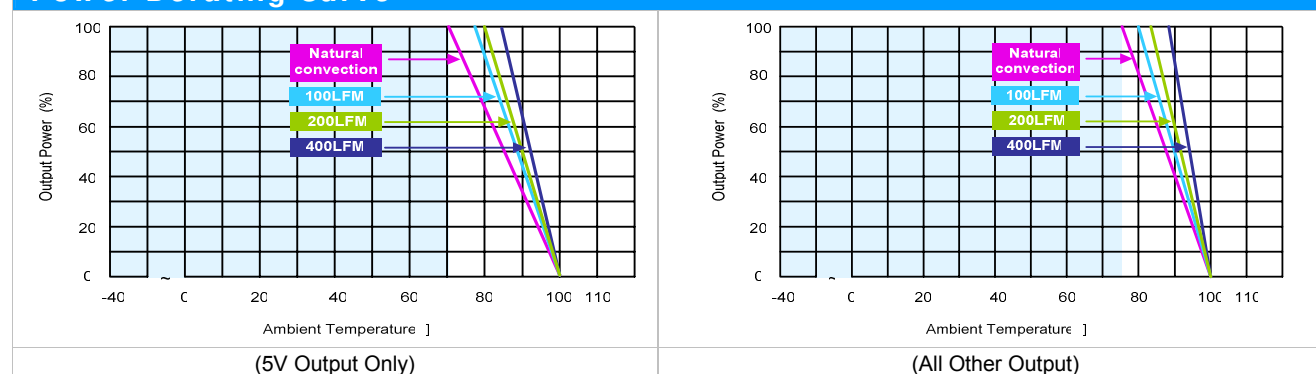
Recommended Outside Input Fuse

3.3V Input Models	5V Input Models	12V Input Models	24V Input Models
800mA Slow-Blow Type	500mA Slow-Blow Type	200mA Slow-Blow Type	100mA Slow-Blow Type

Environmental Specifications

Parameter	Conditions	Min.	Max.	Unit
Operating Temperature Range (with Derating)	Ambient	-40	+85	°C
Case Temperature		---	+90	°C
Storage Temperature Range		-50	+125	°C
Humidity (non condensing)		---	95	% rel. H
Cooling	Free-Air convection			
Lead Temperature (1.5mm from case for 10Sec.)		---	260	°C

Power Derating Curve



Notes

- Specifications typical at Ta=+25°C, resistive load, nominal input voltage and rated output current unless otherwise noted.
- Ripple & Noise measurement bandwidth is 0-20MHz.
- These power converters require a minimum output loading to maintain specified regulation, operation under no-load conditions will not damage these modules; however they may not meet all specifications listed.
- All DC/DC converters should be externally fused at the front end for protection.
- Specifications are subject to change without notice.

