

FEATURES :

- 7PIN SIP Package
- High Efficiency up to 88%
- Unregulated Output Types
- Internal SMD Construction
- Industry Standard Pinout
- 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	Output Voltage	Output Current	Ripple & Noise		Efficiency	Package Style
	Vdc	mA	Typ(mVp-p)	Max(mVp-p)	%TYP	
12DA-05S05N	5	200	25	50	82	1
12DA-05S09N	9	112	25	50	82	1
12DA-05S12N	12	84	25	50	82	1
12DA-05S15N	15	67	25	50	84	1
12DA-12S05N	5	200	25	50	82	1
12DA-12S09N	9	112	25	50	84	1
12DA-12S12N	12	84	25	50	86	1
12DA-12S15N	15	67	25	50	87	1
12DA-15S05N	5	200	25	50	83	1
12DA-15S09N	9	112	25	50	86	1
12DA-15S12N	12	84	25	50	87	1
12DA-15S15N	15	67	25	50	87	1
12DA-24S05N	5	200	25	50	84	1
12DA-24S09N	9	112	25	50	85	1
12DA-24S12N	12	84	25	50	86	1
12DA-24S15N	15	67	25	50	86	1
12DA-48S05N2	5	200	-	80	78	2
12DA-48S09N2	9	112	-	80	81	2
12DA-48S12N2	12	84	-	80	81	2
12DA-48S15N2	15	67	-	80	82	2
12DA-05D05N	±5	±100	25	50	84	1
12DA-05D09N	±9	±56	25	50	86	1
12DA-05D12N	±12	±42	25	50	86	1
12DA-05D15N	±15	±34	25	50	86	1
12DA-12D05N	±5	±100	25	50	85	1
12DA-12D09N	±9	±56	25	50	87	1
12DA-12D12N	±12	±42	25	50	88	1
12DA-12D15N	±15	±34	25	50	87	1
12DA-15D05N	±5	±100	25	50	83	1
12DA-15D09N	±9	±56	25	50	86	1
12DA-15D12N	±12	±42	25	50	87	1
12DA-15D15N	±15	±34	25	50	87	1
12DA-24D05N	±5	±100	25	50	84	1
12DA-24D09N	±9	±56	25	50	85	1
12DA-24D12N	±12	±42	25	50	86	1
12DA-24D15N	±15	±34	25	50	86	1
12DA-48D05N2	±5	±100	-	80	79	2
12DA-48D09N2	±9	±56	-	80	81	2
12DA-48D12N2	±12	±42	-	80	81	2
12DA-48D15N2	±15	±34	-	80	82	2

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DC-DC Converter

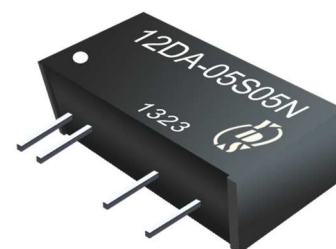
12DA SERIES

1Watt

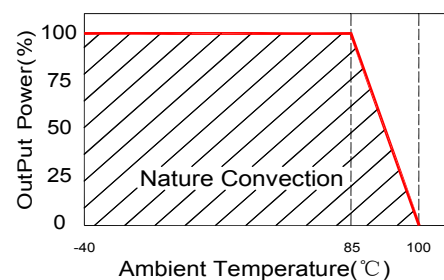
3KV Isolated

Single & Dual Output

SIP7



Temperature Derating Graph



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Rev:1 2018/12/07

Input Specifications

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

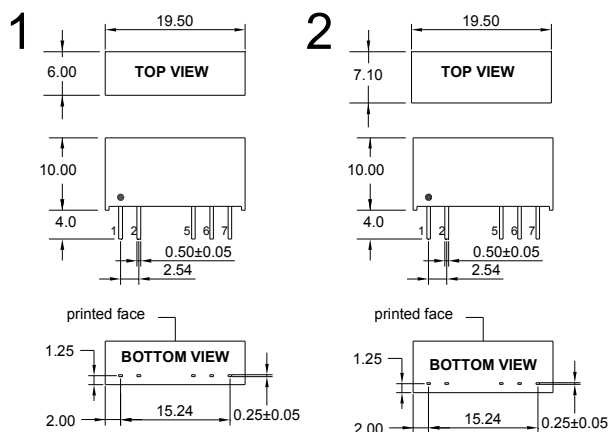
Output Specifications

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	5V,9V (10% To 100% F.L)			7	%
Load Regulation	12V,15V (10% To 100% F.L)			5	%
Load Regulation	±5V,±9V (10% To 100% F.L)			7	%
Load Regulation	±12V,±15V (10% To 100% F.L)			5	%

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Isolation Voltage			3000		Vdc
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		2.1 or 2.7		g
Dimensions	Package1 or Package2	19.5x6.0x10.0 or 19.5x7.1x10.0			mm

Markings and dimensions



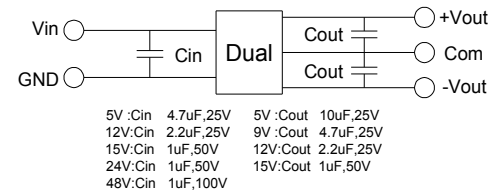
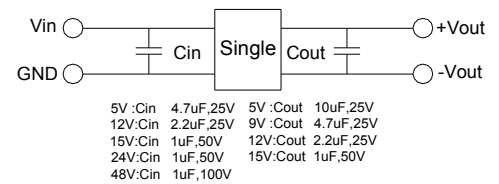
Unit:mm Unless otherwise specified, all tolerances are ±0.25

Part Number

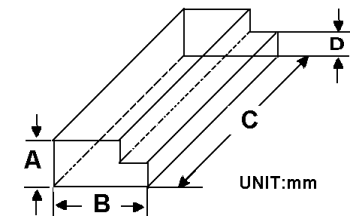
12DA - 05 S 05 N
A B C D E

A:Series
B:Input Voltage
C:Single(S)Dual(D)
D:Output Voltage
E:Unregulated(N)

Recommended Test Circuit



Packaging



Size (mm)			
A	B	C	D
9.50	16.5	522	5.0

PIN Connection

PIN	1	2	5	6	7
Single	+Vin	-Vin	-Vout	No Pin	+Vout
Dual	+Vin	-Vin	-Vout	Com	+Vout