



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 :
 - 1500VDC I/O isolation
 - 3000VDC I/O isolation(optional)
 - Operating temperature range of -40 ~ +85°C without derating
 - Internal SMD technology
 - Built-in EMI filter
 - Cooling by free air convection
 - Non-conductive plastic case
 - Dual in line package
 - Industry standard pinout
 - 100% burn-in test
 - Low cost / High reliability
 - 2 years warranty



SELECTION GUIDE

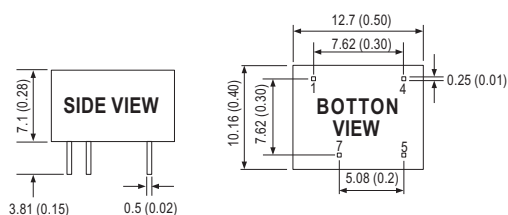
ORDER NO.	SMA01L-05	SMA01M-05	SMA01N-05	SMA01L-09	SMA01M-09	SMA01N-09
DC OUTPUT VOLTAGE	5V			9V		
OUTPUT CURRENT RANGE	0 ~ 200mA			0 ~ 110mA		
EFFICIENCY(Typ.)	77%	79%	77%	77%	78%	75%
ORDER NO.	SMA01L-12	SMA01M-12	SMA01N-12	SMA01L-15	SMA01M-15	SMA01N-15
DC OUTPUT VOLTAGE	12V			15V		
OUTPUT CURRENT RANGE	0 ~ 84mA			0 ~ 67mA		
EFFICIENCY(Typ.)	78%	80%	78%	79%	79%	77%

SPECIFICATION

OUTPUT	RATED POWER	1W						
	RIPPLE & NOISE (max.) Note.2	100mVp-p						
	LINE REGULATION Note.3	±1.2% for 1% input variation						
	LOAD REGULATION Note.4	±8.0%						
	VOLTAGE ACCURACY	±2.0%						
	SWITCHING FREQUENCY(Typ.)	100KHz						
INPUT	VOLTAGE RANGE	4.5 ~ 5.5V	10.8 ~ 13.2V	21.6 ~ 26.4V	4.5 ~ 5.5V	10.8 ~ 13.2V	21.6 ~ 26.4V	
	NORMAL VOLTAGE	5V	12V	24V	5V	12V	24V	
	INPUT CURRENT	Full load	265mA	110mA	57mA	265mA	110mA	57mA
		No load	32mA	15mA	11mA	32mA	15mA	11mA
	PROTECTION (FUSE RECOMMENDED)	500mA	250mA	150mA	500mA	250mA	150mA	
FILTER	Capacitor type							
PROTECTION	OVERLOAD	Momentary Protection type : Broken						
	SHORT CIRCUIT	Momentary Protection type : Broken						
ENVIRONMENT	WORKING TEMP.	-40 ~ +90°C (Refer to "Derating Curve")						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.05% / °C (0 ~ 50°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC	SAFETY STANDARDS	EAC TP TC 004 approved						
	WITHSTAND VOLTAGE	I/P-O/P: 1.5KVDC						
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH						
	ISOLATION CAPACITANCE	80pF max.						
	EMI RADIATION	Compliance to EN55032 Class B, FCC part 15 Class B, EAC TP TC 020						
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A, EAC TP TC 020						
OTHERS	MTBF	700khrs min. MIL-HDBK-217F(25°C)						
	DIMENSION (L*W*H)	12.7*10.16*7.1mm or 0.50**0.40**0.28" inch for 5V,12V input ; 12.7*10.16*7.62mm or 0.50**0.40**0.30" inch for 24V input						
	WEIGHT	1.7g						

■ Mechanical Specification

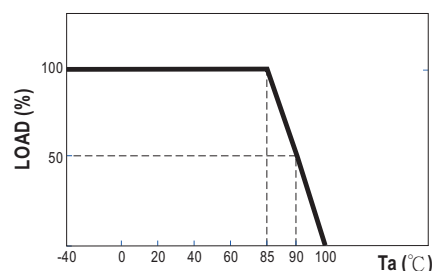
Unit: mm (inch)



■ Pin Configuration

Pin No.	Output
1	-Vin
4	+Vin
5	+Vout
7	-Vout

■ Derating Curve



NOTE

- 1.All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
- 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- 3.Line regulation is measured from low line to high line at rated load.
- 4.Load regulation is measured from 20% to 100% rated load.