



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

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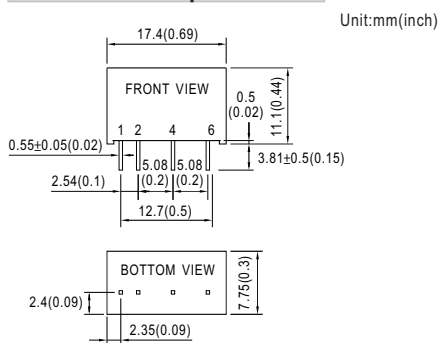
- Features :
  - Single in line package
  - 2:1 wide input range
  - 1500VDC I/O isolation
  - Built-in EMI filter without external components
  - Protections: Short circuit / Overload
  - Cooling by free air convection
  - 100% full load burn-in test
  - Low cost / High reliability
  - 2 years warranty



**SPECIFICATION**

ORDER NO.	SPA01A-05	SPA01B-05	SPA01C-05	SPA01A-12	SPA01B-12	SPA01C-12	SPA01A-15	SPA01B-15	SPA01C-15			
OUTPUT	DC VOLTAGE			12V			15V					
	CURRENT RANGE			8 ~ 83mA			6 ~ 67mA					
	RATED POWER											
	RIPPLE & NOISE (max.) Note.2			80mVp-p			80mVp-p					
	LINE REGULATION Note.3			±0.5%								
	LOAD REGULATION Note.4			±0.5%								
	VOLTAGE ACCURACY			±2.0%								
	SWITCHING FREQUENCY			100KHz min.								
INPUT	VOLTAGE RANGE			A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 75VDC								
	EFFICIENCY (Typ.)			77%	77%	77%	78%	78%	78%	79%	79%	79%
	DC CURRENT	Full load			A: 110mA B: 55mA C: 27mA							
		No load			A: 20mA B: 10mA C: 7mA							
	FILTER			Capacitor Type								
PROTECTION			Fuse recommended									
PROTECTION (Note. 5)	OVERLOAD			130 ~ 200% rated output power								
	SHORT CIRCUIT			Protection type : Recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.			-40 ~ +90°C (Refer to "Derating Curve")								
	WORKING HUMIDITY			20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY			-40 ~ +105°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	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.								
	EMC EMISSION			Compliance to EN55022 Class B, FCC part 15 Class B								
EMC IMMUNITY			Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A									
OTHERS	MTBF			500Khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION			17.4*7.75*11.1mm or 0.69**0.30**0.44" inch (L*W*H)								
	WEIGHT			3g								

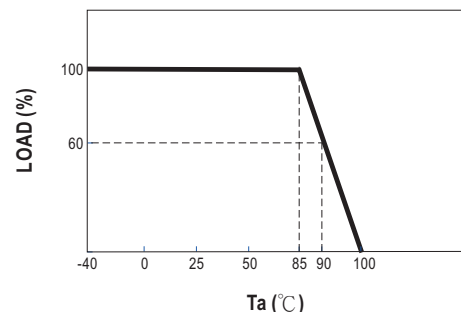
■ Mechanical Specification



■ Pin Configuration

Pin No.	Output
1	-Vin
2	+Vin
4	+Vout
6	-Vout

■ Derating Curve



**NOTE**

- All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
- Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 10% to 100% rated load.
- Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.