



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!



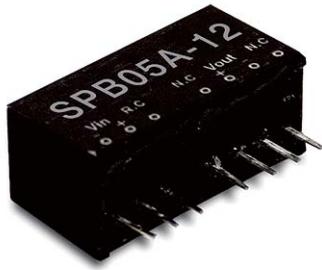
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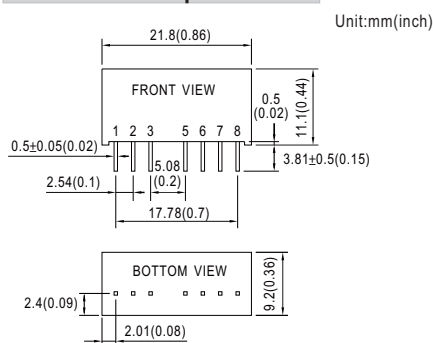
- Features :
 - 2:1 wide input range
 - 1500VDC I/O isolation
 - Built-in remote ON/OFF control
 - Built-in EMI filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Single in line package
 - 100% full load burn-in test
 - Low cost / High reliability
 - Modified models available: output 3.3V/9V
 - 2 years warranty



SPECIFICATION

ORDER NO.	SPB05A-05	SPB05B-05	SPB05C-05	SPB05A-12	SPB05B-12	SPB05C-12	SPB05A-15	SPB05B-15	SPB05C-15
OUTPUT	DC VOLTAGE			12V			15V		
	CURRENT RANGE			42 ~ 417mA			33 ~ 333mA		
	RATED POWER			5W					
	RIPPLE & NOISE (max.) Note.2			80mVp-p			90mVp-p		
	LINE REGULATION Note.3			±0.5%					
	LOAD REGULATION Note.4			±0.5%					
	VOLTAGE ACCURACY			±2.0%					
	SWITCHING FREQUENCY			100KHz min.					
EXTERNAL CAPACITANCE LOAD (max.)			220uF						
INPUT	VOLTAGE RANGE A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC								
	EFFICIENCY (Typ.) 81% 83% 83% 85% 85% 85% 84% 85% 85%								
	DC CURRENT Full load A: 515mA B: 250mA C: 125mA No load A: 40mA B: 25mA C: 15mA								
	FILTER Capacitor Type								
	REMOTE CONTROL Power ON : R.C. ~ -Vin < 1VDC or open ; Power OFF : R.C. ~ -Vin > 4VDC								
	PROTECTION Fuse recommended A: 1000mA B: 600mA C: 300mA Slow-Blow Type								
PROTECTION (Note. 5)	OVERLOAD 150 ~ 250% rated output power Protection type : Recovers automatically after fault condition is removed								
	SHORT CIRCUIT All output equipped with short circuit Protection type : Recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP. -40 ~ +80°C (Refer to "Derating Curve")								
	WORKING HUMIDITY 20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY -55 ~ +105°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT ±0.05% / °C (0 ~ 55°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 EN55032 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 600Khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION 21.8*9.2*11.1mm or 0.86**0.36**0.44" inch (L*W*H)								
	WEIGHT 4.8g								

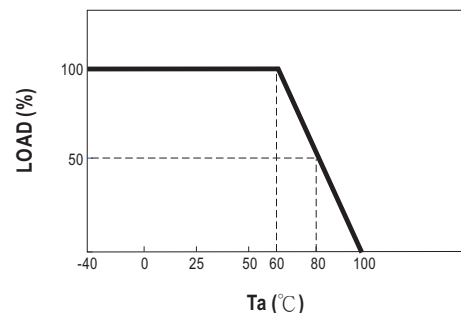
■ Mechanical Specification



■ Pin Configuration

Pin No.	Output
1	-Vin
2	+Vin
3	R.C.
5	N.C.
6	+Vout
7	-Vout
8	N.C.

■ 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.