



#### Features:

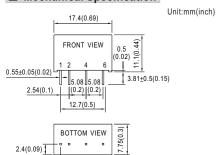
- Single in line package
- 2:1 wide input range
- 1500VDC I/O isolation
- · Built-in EMI filter without external components
- · Protections: Short circuit / Overload
- · Cooling by free air convection
- 100% full load burn-in test
- · Low cost / High reliability
- 2 years warranty

## **SPECIFICATION**

FC CE

ORDER NO.			SPA01A-05	SPA01B-05	SPA01C-05	SPA01A-12	SPA01B-12	SPA01C-12	SPA01A-15	SPA01B-15	SPA01C-15
	DC VOLTAGE		5V			12V			15V		
ОИТРИТ	CURRENT RANGE		20 ~ 200mA 8 ~ 83mA 6 ~ 67mA								
	RATED POWER		1W								
	RIPPLE & NOISE (max.) Note.2		60mVp-p			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	A: 20mA B: 10mA C: 7mA							
	FILTER		Capacitor Type								
	PROTECTION		Fuse recommended								
PROTECTION (Note. 5)	OVERLOAD		130 ~ 200% 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 ~ +90°C (Refer to "Derating Curve")								
	WORKING HUMIDITY		20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY		-40 ~ +105°C, 10 ~ 95% RH								
			±0.05% / ℃ (0~50℃)								
	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		/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH								
			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)								
OTHERS			17.4*7.75*11.1mm or 0.69"*0.30"*0.44" inch (L*W*H)								
	WEIGHT		3g								

### **■** Mechanical Specification

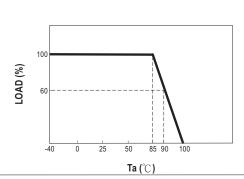


2.35(0.09)

# ■ Pin Configuration

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

### ■ Derating Curve



### NOTE

- 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 10% to 100% rated load.
- 5.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.