



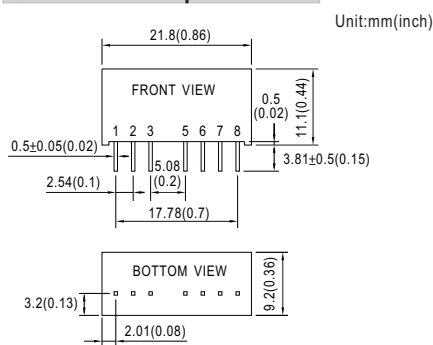
- Features :
 - 2:1 wide input range
 - 4:1 wide input range (Option)
 - 1000VDC I/O isolation
 - 3000VDC I/O isolation (Option)
 - Built-in remote ON/OFF control
 - Built-in EMI filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Single in line package
 - 100% full load burn-in test
 - Low cost / High reliability
 - Modified models available: output 3.3V/9V
 - 2 years warranty



SPECIFICATION

ORDER NO.	SPA02E-05	SPA02A-05	SPA02B-05	SPA02C-05	SPA02E-12	SPA02A-12	SPA02B-12	SPA02C-12	SPA02E-15	SPA02A-15	SPA02B-15	SPA02C-15												
OUTPUT	DC VOLTAGE				5V				12V				15V											
	CURRENT RANGE				40 ~ 400mA				15 ~ 150mA				17 ~ 167mA											
	RATED POWER				2W				1.8W				2W											
	RIPPLE & NOISE (max.) Note.2				60mVp-p				60mVp-p				60mVp-p											
	LINE REGULATION Note.3				±0.5%				±0.5%				±0.5%											
	LOAD REGULATION Note.4				±0.5%				±0.5%				±0.5%											
	VOLTAGE ACCURACY				±2.0%				±2.0%				±2.0%											
SWITCHING FREQUENCY				100KHz min.				100KHz min.				100KHz min.												
INPUT	VOLTAGE RANGE												E: 4.5 ~ 9VDC A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC											
	EFFICIENCY (Typ.)												71% 76% 76% 74% 74% 80% 80% 82% 76% 80% 80% 80% 78%											
	DC CURRENT												Full load E: 600mA A: 225mA B: 115mA C: 60mA No load E: 50mA A: 25mA B: 15mA C: 8mA											
	FILTER												Capacitor Type											
	REMOTE CONTROL												Power ON : R.C. ~ -Vin < 1VDC or open ; Power OFF : R.C. ~ -Vin > 4VDC or short											
PROTECTION												Fuse recommended												
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 ~ +85°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: 1KVDC											
	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											

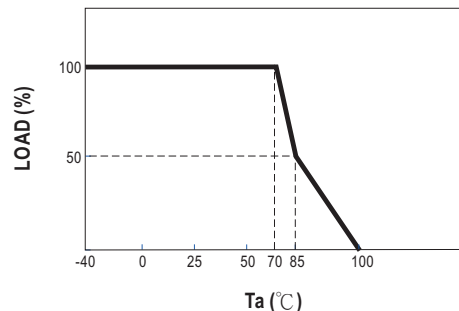
■ Mechanical Specification



■ 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.