Features :

- 1000VDC I/O isolation
- Internal SMD technology
- Built-in EMI filter
- Cooling by free air convection
- Non-conductive plastic case
- Dual in line package
- SIP packge is available
- 100% burn-in test
- Low cost / High reliability
- 2 years warranty

SELECTION GUIDE

ORDER NO.		SUS01L-05	SUS01M-05	SUS01N-05	SUS01O-05	SUS01L-09	SUS01M-09	SUS01N-09	SUS01O-09
	DC OUTPUT VOLTAGE	5V				9V			
	OUTPUT CURRENT RANGE	0 ~ 200mA				0 ~ 111mA			
	EFFICIENCY	73%	74%	72%	74%	75%	79%	80%	77%

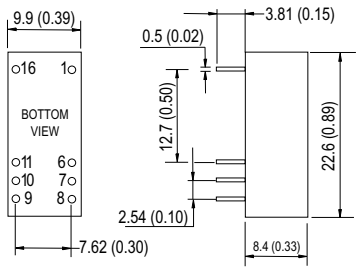
ORDER NO.		SUS01L-12	SUS01M-12	SUS01N-12	SUS01O-12	SUS01L-15	SUS01M-15	SUS01N-15	SUS01O-15
	DC OUTPUT VOLTAGE	12V				15V			
	OUTPUT CURRENT RANGE	0 ~ 84mA				0 ~ 67mA			
	EFFICIENCY	78%	82%	83%	83%	79%	82%	83%	83%

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	50KHz min.							
INPUT	VOLTAGE RANGE	4.5 ~ 5.5V	10.8 ~ 13.2V	21.6 ~ 26.4V	43.2 ~ 52.8V	4.5 ~ 5.5V	10.8 ~ 13.2V	21.6 ~ 26.4V	43.2 ~ 52.8V
	NORMAL VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V
	INPUT CURRENT Full load	280mA	112mA	55mA	28mA	280mA	112mA	55mA	28mA
	INPUT CURRENT No load	21mA	11mA	10mA	3mA	21mA	11mA	10mA	3mA
	FILTER	Capacitor type							
	PROTECTION	Fuse recommended							
PROTECTION	OVERLOAD	Momentary							
		Protection type : Broken							
	SHORT CIRCUIT	Momentary							
		Protection type : Broken							
ENVIRONMENT	WORKING TEMP.	-25 ~ +71℃ (Refer to output load derating curve)							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-25 ~ +105℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	WITHSTAND VOLTAGE	I/P-O/P:1KVDC							
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25℃/ 70% RH							
	ISOLATION CAPACITANCE	80pF max.							
OTHERS	MTBF	700khrs min. MIL-HDBK-217F(25℃)							
	DIMENSION	22.6*9.9*8.4mm or 0.89"*0.39"*0.33" inch (L*W*H)							
	WEIGHT	3.1g							

Mechanical Specification

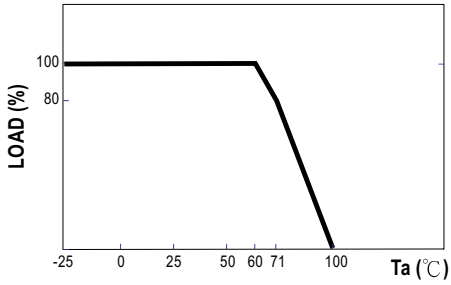
Unit: mm (inch)



Pin Configuration

Pin No.	Output
1 & 16	+Vin
6 & 11	-Vout
7 & 10	+Vout
8 & 9	-Vin

Derating Curve



NOTE

1.All parameters are specified at normal input, rated load, 25℃ 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.

Model : SUS01N-05 DC-DC Unregulated Single Output Converter
V1 : 5V / 0~200mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-2%~+2% (Max)	I/P:24VDC O/P:FULL LOAD Ta:25℃	-1.4%	P
2	RIPPLE & NOISE	100mVp-p (Max)	I/P:24VDC O/P:FULL LOAD Ta:25℃	33mV	P
3	LINE REGULATION	-12%~+12% (Typ)	I/P:21.6VDC~26.4VDC O/P:FULL LOAD Ta:25℃	-11.9%~+12.2%	P
4	LOAD REGULATION	-8%~+8% (Typ)	I/P:24VDC O/P:20%~FULL LOAD Ta:25℃	-2.4%~+2.4%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	72% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25℃	77.0%	P
2	DC CURRENT	57mA (Max)	I/P:24VDC O/P:FULL LOAD Ta:25℃	56mA	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN：12HRS I/P:24VDC O/P:FULL LOAD Ta=25℃			P

Position	P/N	TEMP Ta=25℃
CASE	SUS01N-05	37.6℃

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1KVDC/min	I/P-O/P:1KVDC/min Ta:25℃	I/P-O/P:0.02mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500VDC Ta:25℃	I/P-O/P:18GΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2003.7.23	SUS01N-05	PASS	FRANK.CHEN	MAX LIN