

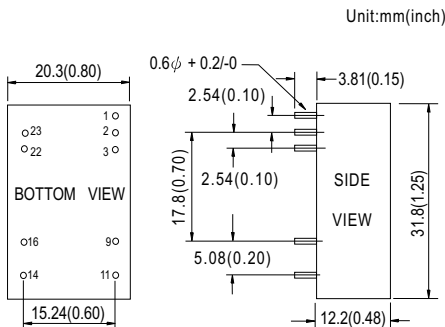
- Features :
 - 2:1 wide input range
 - 1500VDC I/O isolation
 - Built-in remote ON/OFF control
 - Built-in EMI filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Five-sided shield metal case
 - 100% full load burn-in test
 - Low cost / High reliability
 - Modified models available: output 2.5V/3.3V
 - 2 years warranty



SPECIFICATION

ORDER NO.	SCW12A-05	SCW12B-05	SCW12C-05	SCW12A-12	SCW12B-12	SCW12C-12	SCW12A-15	SCW12B-15	SCW12C-15	
OUTPUT	DC VOLTAGE			12V			15V			
	CURRENT RANGE			200 ~ 1000mA			160 ~ 800mA			
	RATED POWER									12W
	RIPPLE & NOISE (max.) Note.2			50mVp-p			60mVp-p			
	LINE REGULATION Note.3			±0.5%						
	LOAD REGULATION Note.4			±0.5%						
	VOLTAGE ACCURACY			±2.0%						
SWITCHING FREQUENCY			400KHz min.							
INPUT	VOLTAGE RANGE									A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC
	EFFICIENCY (Typ.)									82% 83% 84% 82% 83% 83% 82% 85% 83%
	DC CURRENT									Full load: A: 1245mA B: 625mA C: 320mA No load: A: 70mA B: 35mA C: 25mA
	FILTER									Pi network
	PROTECTION									Fuse recommended
PROTECTION (Note. 5)	OVERLOAD									110 ~ 180% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed
	SHORT CIRCUIT									All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed
ENVIRONMENT	WORKING TEMP.									-25 ~ +71°C (Refer to output load derating curve)
	WORKING HUMIDITY									20% ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY									-25 ~ +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									2200pF max.
	EMI CONDUCTION & RADIATION									Compliance to EN55022 Class A, FCC part 15 Class A
	EMS IMMUNITY									Compliance to EN61000-4-2,3,4,5,6,8 light industry level, criteria A
OTHERS	REMOTE CONTROL									Power ON: R.C. ~ -Vin > 4VDC or open ; Power OFF: R.C. ~ -Vin < 1VDC or short
	MTBF									600Khrs min. MIL-HDBK-217F(25°C)
	DIMENSION									31.8*20.3*12.2mm or 1.25**0.80**0.48" inch (L*W*H)
	WEIGHT									18.5g

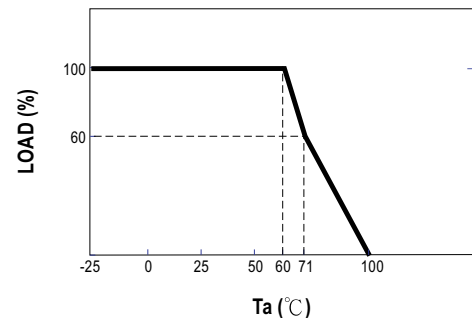
Mechanical Specification



Pin Configuration

Pin No.	Output
1	R.C.
2 & 3	-Vin
9	N.C.
11	N.C.
14	+Vout
16	-Vout
22 & 23	+Vin

Derating Curve



NOTE

- 1.All parameters are specified at normal input, rated load, 25°C 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.
- 5.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.

Model : SCW12A-15 12W
+15V / 160~800mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OUTPUT VOLTAGE ACCURACY	-2%~+2% (Max.)	I/P: 12VDC O/P:50% LOAD Ta:25°C	+0.83%	P
2	RIPPLE & NOISE	60mVp-p (Max.)	I/P:12VDC O/P:FULL LOAD Ta:25°C	30mVp-p	P
3	LINE REGULATION	-0.5%~+0.5% (Max.)	I/P:9VDC ~18VDC O/P:FULL LOAD Ta:25°C	-0.01%~+0.01%	P
4	LOAD REGULATION	-0.5%~+0.5% (Max.)	I/P:12VDC O/P: MIN ~FULL LOAD Ta:25°C	-0.02%~+0.02%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	9VDC-18VDC	I/P:TESTING O/P:FULL LOAD Ta:25°C	8.45VDC-18VDC	P
2	EFFICIENCY	82% (Typ.)	I/P:12VDC O/P:FULL LOAD Ta:25°C	86.84%	P
3	INPUT CURRENT	1245mA FULL LOAD (Max.) 70mA NO LOAD (Typ.)	I/P:12VDC O/P:NO / FULL LOAD Ta:25°C	1161mA / FULL LOAD 23mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110%~180% (Typ.)	I/P:12VDC O/P:TESTING Ta:25°C	157% HICCUP MODE AUTO-RECOVER	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:18VDC O/P:SHORT Ta:25°C	NO DAMAGE HICCUP MODE AUTO-RECOVER	P

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	REMOTE CONTROL	POWER ON R.C ~ -Vin > 4VDC OR OPEN POWER OFF R.C ~ -Vin < 1VDC OR SHORT	I/P:12VDC O/P:FULL LOAD Ta:25°C	POWER ON : > 2.32VDC OR OPEN POWER OFF : < 2.32VDC OR SHORT	P

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1500 VDC/min	I/P-O/P:1500 VDC/min Ta:25°C	I/P-O/P: 0.002mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

E.M.C TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RADIATION	EN55022 CLASS A	I/P:12VDC O/P:FULL LOAD Ta:25°C	PASS	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2009.3.12	SAMPLE (0820R)	PASS	PETER	VINCENT ZENG