



MODEL : SCW05B15

## OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE (Max)	V1: 60mVp-p	I/P: 24 VDC O/P:FULL LOAD Ta:25°C	V1: 6.20mVp-p (Max)	P
2	OUTPUT VOLTAGE TOLERANCE (Max)	V1: 2%~ -2%	I/P: 18 VDC / 36 VDC O/P:FULL / MIN. LOAD Ta:25°C	V1: -0.04%~0.04%	P
3	LINE REGULATION (Max)	V1: 0.5%~ -0.5%	I/P: 18 VDC / 36 VDC O/P:FULL LOAD Ta:25°C	V1: 0%~ 0%	P
4	LOAD REGULATION (Max)	V1: 0.5%~ -0.5%	I/P: 24 VDC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.04%~0.04%	P
5	OVER/UNDERSHOOT TEST	< ±5%	I/P: 24 VDC O/P:FULL LOAD Ta:25°C	TEST:<5%	P
6	DYNAMIC LOAD	V1: 1500mVp-p	I/P: 24VDC (1).O/P : FULL /Min LOAD 90%DUTY/ 1KHZ (2).O/P : FULL /Min LOAD 90%DUTY/ 3KHZ (3).O/P : FULL /Min LOAD 90%DUTY/ 5KHZ (4).O/P : FULL /Min LOAD 50%DUTY/ 120HZ Ta : 25°C	129mVp-p 126mVp-p 112mVp-p 129mVp-p	P

## INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	18VDC~ 36VDC	I/P:TESTING O/P:FULL LOAD Ta:25°C	14.978 V~ 36V	P
			I/P: (1) LOW-LINE-0.2=17.8V HIGH-LINE+3V=39V O/P:FULL/MIN LOAD ON: 30 Sec . OFF: 30 Sec 10MIN (2) 24VDC ON: 0.5 Sec . OFF:0.5 Sec 10MIN (3)NOR ON:3Sec OFF:3Sec 12HOURS ( DC POWER ON/OFF NO DAMAGE )	TEST(1) <u>OK</u> (2) <u>OK</u> (3) <u>OK</u>	
2	EFFICIENCY(TYP)	83% (TYP)	I/P: 24VDC O/P:FULL LOAD Ta:25°C	83.98%	P
3	INPUT CURRENT(TYP)	24VDC/ 0.301A	I/P: 24VDC O/P:FULL LOAD Ta:25°C	I = 0.295A/24VDC	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	150%~250%RATED OUTPUT POWER	I/P:24VDC I/P:18VDC I/P:36VDC O/P:TESTING Ta:25°C	195.47%/ 24VDC 166.95%/ 36VDC 185.72%/ 18VDC Hiccup Mode	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 24VDC O/P: FULL LOAD Ta:25°C	NO DAMAGE Hiccup Mode	P

**COMPONENT STRESS TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	Power Transistor (D to S) or (C to E) Peak Voltage	Q2 Rated : 5.4A/ 100 V	I/P:High-Line +3V =39V O/P: (1)Full Load input on/off (2)Output Short (3)Full Load Continue Ta:25°C	(1) 86.0V (2) 85.2V (3) 82.8V	P
2	Diode Peak Voltage	D100 Rated : 3A/60 V	I/P:High-Line +3V =39V O/P: (1)Full Load input on/off (2)Output Short (3)Full Load Continue Ta:25°C	(1) 63.6V (2) 52.8V (3) 64.0V	P
3	Control IC Voltage Test	U2 Rated : 30 V 8V (MIN)	I/P:High-Line +3V =39V O/P: (1)Full Load input on/off (2) Output Short (3)O.L.P Ta:25°C	(1) 12.7V (2) 9.84V (3) 10.9V	P

**RELIABILITY TEST**

**ENVIRONMENT TEST**

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
2	TEMPERATURE RISE TEST	MODEL : 1. ROOM AMBIENT BURN-IN : 1HRS I/P : 24VDC O/P : FULL LOAD Ta= 28.1 °C 2. HIGH AMBIENT BURN-IN : 1HRS I/P : 24VDC O/P : FULL LOAD Ta= 59.2 °C			P



4	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 18 VDC/ 36 VDC O/P : 100 % LOAD Ta= -45 °C	TEST :	P
5	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 55 °C NO DAMAGE	I/P : VDC O/P : FULL LOAD Ta= 55 °C HUMIDITY= 95 %R.H	TEST	P
6	TEMPERATURE COEFFICIENT	± 0.03 %(0~55°C)	I/P : 24 VDC O/P : FULL LOAD	± 0 %(0~50°C)	P
7	STORAGE TEMPERATURE TEST	1. Thermal shock Temperature : -40°C~ +105°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 5 CYCLE 5. Input/Output condition : STATIC		OK	P
8.	THERMAL SHOCK TEST	1. Thermal shock Temperature : -40°C~ +71°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : 24VDC/Full Load		OK	P
9	VIBRATION TEST	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 5G (加嚴 5G TEST 及加測 RANDOM TEST/IEC61373 TEST) (5) Test Time : 60min in each axis (X.Y.Z) (6) Ta : 25°C		TEST :	P
11	MTBF	MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE : 900K HRS		OK	P

TEST RESULT	TESTER	APPROVAL
PASS	Frank	Wangdz

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