



# Test Report : SKMW06F-05

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6W 1"x1" Package DC-DC Regulated Converter

## ■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

## ■ SAFETY TEST

Safety Test

## ■ RELIABILITY TEST

Environment Test

Other

**DESIGN VERIFY TEST**
**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-1.0% ~ +1.0 %	I/P:24VDC O/P:FULL LOAD Ta:25°C	+0.43%	P
2	RIPPLE & NOISE	85 mVp-p (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	10mV	P
3	LINE REGULATION	-0.2% ~ +0.2%	I/P:9VDC~36VDC O/P:FULL LOAD Ta:25°C	-0.02% ~ -0.02%	P
4	LOAD REGULATION	-1.0% ~ +1.0%	I/P:24VDC O/P:5% LOAD~FULL LOAD Ta:25°C	-0.09% ~ +0.09%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	9 VDC ~36 VDC	I/P:TESTING O/P:FULL LOAD Ta:25°C	7.2 VDC ~ 36.0 VDC	P
2	EFFICIENCY	81% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25°C	82.81%	P
3	DC CURRENT	309 mA / FULL LOAD 5 mA / NO LOAD	I/P:24VDC O/P:NO / FULL LOAD Ta:25°C	303 mA / FULL LOAD 5.0 mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	CONTINUOUS	I/P:36VDC O/P:FULL LOAD Ta:25°C	HICCUP MODE AUTO-RECOVER	P
2	OVER LOAD PROTECTION	110% ~ 190%	I/P:24VDC O/P:TESTING Ta:25°C	161.6% HICCUP MODE AUTO-RECOVER	P

**SAFETY TEST**
**SAFETY TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1.5K VDC/min	I/P-O/P:1.5K 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

**RELIABILITY TEST**
**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT							
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 8HRS I/P:24VDC O/P:FULL LOAD Ta=25°C 2. HIGH AMBIENT BURN-IN : 8HRS I/P:24VDC O/P:FULL LOAD Ta=71°C			P							
		<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CASE</td> <td>47.4°C</td> <td>90.9°C</td> </tr> </tbody> </table>		NO		Position	1	2	1	CASE	47.4°C	90.9°C
NO	Position	1	2									
1	CASE	47.4°C	90.9°C									
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 4 HOURS	I/P:24VDC O/P: FULL LOAD Ta= -40°C	TEST : OK	P							

**OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-HDBK-217F,GB,25°C TOTAL FAILURE RATE : 0.622928 M.T.B.F : 1605.322K HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG