



Test Report : SFTN02N-05N

2W SMD Package DC-DC Unregulated Converter

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

■ SAFETY TEST

Safety Test

■ RELIABILITY TEST

Environment Test

Other Test

DESIGN VERIFY TEST
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	VOLTAGE ACCURACY	-5.0% ~ +5.0 % (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	+0.68%	P
2	RIPPLE & NOISE	150 mVp-p (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	35 mV	P
3	LINE REGULATION	-12% ~ +12% (Max)	I/P:21.6VDC~26.4VDC O/P:FULL LOAD Ta:25°C	-11.00% ~ +11.00%	P
4	LOAD REGULATION	-5% ~ +5% (Max)	I/P:24VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-2.34% ~ +2.37%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	EFFICIENCY	81% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25°C	84.41%	P
2	DC CURRENT	107 mA / FULL LOAD (Max) 15 mA / NO LOAD (Max)	I/P:24VDC O/P:NO / FULL LOAD Ta:25°C	98.67 mA / FULL LOAD 7.4 mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	SHORT PROTECTION	0.5 second max.	I/P:26.4VDC O/P:FULL LOAD Ta:25°C	OK	P

SAFETY TEST
SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC
1	WITHSTAND VOLTAGE	I/P-O/P:3K VDC/min	I/P-O/P:3K VDC/min Ta:25°C	I/P-O/P: 0.002mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>10GΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>10GΩ NO DAMAGE	P

RELIABILITY TEST
ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDITC												
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:24VDC O/P:FULL LOAD Ta=25°C 2. HIGH AMBIENT BURN-IN : 4HRS I/P:24VDC O/P:FULL LOAD Ta=90°C 3. HIGH AMBIENT BURN-IN : 4HRS I/P:24VDC O/P:60% LOAD Ta=95°C			P												
		<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CASE</td> <td>CENTER</td> <td>38.0°C</td> <td>101.4°C</td> <td>103.1°C</td> </tr> </tbody> </table>				NO	Position	P/N	1	2	3	1	CASE	CENTER	38.0°C	101.4°C	103.1°C
NO	Position	P/N	1	2	3												
1	CASE	CENTER	38.0°C	101.4°C	103.1°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	VERDITC
1	MTBF	MIL-HDBK-217F,GB,25°C TOTAL FAILURE RATE : 1.12866 M.T.B.F : 886 KHRS			P

TEST RESULT	TESTER	APPROVAL
PASS	ARCHEN HSIAO	PETER CHENG