



# Test Report : SFTN01M-05N

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1W SMD Package DC-DC Unregulated Converter

## ■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

## ■ SAFETY TEST

Safety Test

## ■ RELIABILITY TEST

Other Test

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

| NO | TEST ITEM        | SPECICATION    | TEST CONDITION                                  | RESULT            | VERDITC |
|----|------------------|----------------|---|-------------------|---------|
| 1  | VOLTAGE ACCURACY | -5.0% ~ +5.0 % | I/P:12VDC<br>O/P:FULL LOAD<br>Ta:25°C           | -2.64%            | P       |
| 2  | RIPPLE & NOISE   | 100 mVp-p      | I/P:12VDC<br>O/P:FULL LOAD<br>Ta:25°C           | 35 mV             | P       |
| 3  | LINE REGULATION  | -12% ~ +12%    | I/P:10.8VDC~13.2VDC<br>O/P:FULL LOAD<br>Ta:25°C | -11.11% ~ +11.28% | P       |
| 4  | LOAD REGULATION  | -8% ~ +8%      | I/P:12VDC<br>O/P:10% LOAD~FULL LOAD<br>Ta:25°C  | -2.15% ~ +2.41%   | P       |

**INPUT FUNCTION TEST**

| NO | TEST ITEM  | SPECICATION                           | TEST CONDITION                             | RESULT                                     | VERDITC |
|----|------------|---------------------------------------|--|--|---------|
| 1  | EFFICIENCY | 80% (Typ)                             | I/P:12VDC<br>O/P:FULL LOAD<br>Ta:25°C      | 80.15%                                     | P       |
| 2  | DC CURRENT | 107 mA / FULL LOAD<br>13 mA / NO LOAD | I/P:12VDC<br>O/P:NO / FULL LOAD<br>Ta:25°C | 101.4 mA / FULL LOAD<br>12.19 mA / NO LOAD | P       |

**PROTECTION FUNCTION TEST**

| NO | TEST ITEM        | SPECICATION     | TEST CONDITION                          | RESULT | VERDITC |
|----|------------------|-----------------|---|--------|---------|
| 1  | SHORT PROTECTION | 0.5 second max. | I/P:13.2VDC<br>O/P:FULL LOAD<br>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<br>Ta:25°C | I/P-O/P: 0.002mA<br>NO DAMAGE | P       |
| 2  | ISOLATION RESISTANCE | I/P-O/P:500VDC>10GΩ | I/P-O/P:500 VDC<br>Ta:25°C    | I/P-O/P>10GΩ<br>NO DAMAGE     | P       |

## ■ RELIABILITY TEST

### OTHER

| NO | TEST ITEM | SPECICATION   | TEST CONDITION | RESULT | VERDITC |
|----|-----------|---|----------------|--------|---------|
| 1  | MTBF      | MIL-HDBK-217F,GB,25°C<br>TOTAL FAILURE RATE : 0.956937<br>M.T.B.F : 1045 KHRS |                |        | P       |

| TEST RESULT | TESTER       | APPROVAL    |
|-------------|--------------|-------------|
| PASS        | ARCHEN HSIAO | PETER CHENG |