



# Test Report : DETN02M-05N

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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

Other test

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

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-5.0% ~ +5.0 %	I/P:12VDC O/P:FULL LOAD Ta:25°C	-3.56% -3.34%	P
2	RIPPLE & NOISE	150 mVp-p	I/P:12VDC O/P:FULL LOAD Ta:25°C	65 mV 58 mV	P
3	LINE REGULATION	-12% ~ +12%	I/P:10.8VDC~13.2VDC O/P:FULL LOAD Ta:25°C	-11.14% ~ +11.33% -11.16% ~ +11.28%	P
4	LOAD REGULATION	-8% ~ +8%	I/P:12VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-2.45% ~ +2.38% -2.28% ~ +2.28%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	82% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	83.52%	P
2	DC CURRENT	208 mA / FULL LOAD 30 mA / NO LOAD	I/P:12VDC O/P:NO / FULL LOAD Ta:25°C	192.1 mA / FULL LOAD 17.2 mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	5 second max	I/P:13.2VDC O/P:FULL LOAD Ta:25°C	OK	P

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

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
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****OTHER**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
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