



# Test Report : DETN02L-12N

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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 % (Max)	I/P:5VDC O/P:FULL LOAD Ta:25°C	-2.70% -2.83%	P
2	RIPPLE & NOISE	150 mVp-p (Max)	I/P:5VDC O/P:FULL LOAD Ta:25°C	35 mV 35 mV	P
3	LINE REGULATION	-12% ~ +12% (Max)	I/P:4.5VDC~5.5VDC O/P:FULL LOAD Ta:25°C	-11.64% ~ +11.52% -11.47% ~ +11.72%	P
4	LOAD REGULATION	-8% ~ +8% (Max)	I/P:5VDC O/P:10% LOAD~FULL LOAD Ta:25°C	-4.08% ~ +4.04% -4.15% ~ +3.93%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	81% (Typ)	I/P:5VDC O/P:FULL LOAD Ta:25°C	83.46%	P
2	DC CURRENT	500 mA / FULL LOAD (Max) 60 mA / NO LOAD (Max)	I/P:5VDC O/P:NO / FULL LOAD Ta:25°C	465.5 mA / FULL LOAD 37.1 mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SHORT PROTECTION	5 second max	I/P:5.5VDC O/P:FULL LOAD Ta:25°C	OK	P

**SAFETY TEST**
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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