



Test Report : DPAN02A-15

2W SIP 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

DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-1.5 % ~ +1.5 % (Max)	I/P:12VDC O/P:FULL LOAD Ta:25°C	V1 +0.12% V2 +0.05%	P
2	RIPPLE & NOISE	75 mVp-p (Max)	I/P:12VDC O/P:FULL LOAD Ta:25°C	V1 8.1mV V2 9.2mV	P
3	LINE REGULATION	-0.5% ~ +0.5% (Max)	I/P:9VDC-18VDC O/P:FULL LOAD Ta:25°C	V1 -0.06%~ +0.02% V2 -0.01%~ +0.02%	P
4	LOAD REGULATION	-1.0% ~ +1.0% (Max)	I/P:12VDC O/P:10%LOAD-FULL LOAD Ta:25°C	V1 -0.03%~ +0.03% V2 -0.01%~ -0.01%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	EFFICIENCY	83% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	82%	P
2	DC CURRENT	202 mA / FULL LOAD (Max) 31 mA / NO LOAD (Max)	I/P:12VDC O/P:NO / FULL LOAD Ta:25°C	202mA / FULL LOAD 31mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	YES	I/P:12VDC O/P:TESTING Ta:25°C	194%	P
2	SHORT PROTECTION	CONTINUOUS	I/P:18VDC O/P:FULL LOAD Ta:25°C	CONTINUOUS	P

■ SAFETY TEST

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1500 VDC/min	I/P-O/P:1500 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 : 12HRS I/P:12VDC O/P:FULL LOAD Ta=25°C 2. HIGH AMBIENT BURN-IN : 12HRS I/P:12VDC O/P:FULL LOAD Ta=85°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>35.4°C</td> <td>95.4°C</td> </tr> </tbody> </table>		NO	Position	1	2	1	CASE	35.4°C	95.4°C		
NO	Position	1	2										
1	CASE	35.4°C	95.4°C										
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P:12VDC O/P: FULL LOAD Ta= -40°C	TEST : OK	P								

OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	MTBF	MIL-KDBK-217F NOTICE 1 PARTS COUNT TOTAL FAILURE RATE : 0.348 M.T.B.F : 2870087 HRS			P

TEST RESULT	TESTER	APPROVAL
PASS	PETER CHENG	VINCENT ZENG