

Model : DKA30C-12    30W    DC-DC    Dual Output Converter  
 V1 : +12V / 125~1250mA  
 V2 : -12V / 125~1250mA

**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OUTPUT VOLTAGE ACCURACY	V1:-2%~+2% (Max) V2:-2%~+2% (Max)	I/P: 48VDC O/P:50% LOAD Ta:25°C	V1:+0.7% V2:+0.8%	P
2	RIPPLE & NOISE	V1:100mVp-p (Max) V2:100mVp-p (Max)	I/P:48VDC O/P:FULL LOAD Ta:25°C	V1:15mVp-p V2:15mVp-p	P
3	LINE REGULATION	V1:-0.5%~+0.5% (Max) V2:-0.5%~+0.5% (Max)	I/P:36VDC ~72VDC O/P:FULL LOAD Ta:25°C	V1: -0%~+0% V2: -0.1%~+0%	P
4	LOAD REGULATION	V1:-0.5%~+0.5% (Max) V2:-0.5%~+0.5% (Max)	I/P:48VDC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.1%~+0.1% V2: -0.1%~+0.1%	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	36VDC~72VDC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	23V~72Vdc	P
2	EFFICIENCY	81% (TYP)	I/P:48VDC O/P:FULL LOAD Ta:25°C	87.3%	P
3	INPUT CURRENT	0.77A (Typ.) FULL LOAD 10mA (Typ.) NO LOAD	I/P:48VDC O/P:TEST Ta:25°C	0.72A / FULL LOAD 10mA / NO LOAD	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	YES	I/P:48VDC O/P:TESTING Ta:25°C	120% HICCUP MODE AUTO-RECOVER	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:72VDC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE AUTO-RECOVER	P



## CONTROL FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	REMOTE CONTROL	Power on >5.5V (typ) or open Power off <1.2V (typ) or short	I/P:48VDC O/P:FULL LOAD Ta:25°C	Power on>3.7Vdc Power off<3.3Vdc	P
2	TRIM	+10%~-10%(Typ)	Trim ~ +Vout Trim DOWN Trim ~ -Vout Trim UP Using 500k ohm VR	Trim DOWN -44% Trim UP +10%	P

## ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT						
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 24HRS I/P:48VDC O/P: FULL LOAD Ta= 25°C			P						
			<table border="1"> <thead> <tr> <th>Position</th> <th>P/N</th> <th>TEMP Ta=25°C</th> </tr> </thead> <tbody> <tr> <td>FRONT</td> <td>CENTER</td> <td>50.0°C</td> </tr> </tbody> </table>	Position	P/N	TEMP Ta=25°C	FRONT	CENTER	50.0°C		
Position	P/N	TEMP Ta=25°C									
FRONT	CENTER	50.0°C									
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOURS	I/P:48VDC O/P: 100% LOAD Ta= -10°C	TEST : OK	P						
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 96 HOURS IN CHAMBER ON CONTROL 71°C NO DAMAGE	I/P:48VDC O/P:FULL LOAD Ta=71°C HUMIDITY= 95 %R.H	TEST : OK	P						

## SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1000 VDC/min	I/P-O/P:1000 VDC/min Ta:25°C	I/P-O/P: 0.02mA 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

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2003.6.25	DKA30C-12	PASS	PETER CHENG	MAX LIN