

MESSRS :

Reliability Test Data

CUSTOMER'S PRODUCT NAME:

TDK-Lambda DC/DC CONVERTER UNIT
PRODUCT NAME: ALD-414012PJ126



TDK-Lambda Corporation

PREPARED BY	APPROVED BY	AUTHORIZED BY
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[1] Test Sample

ALD-414012PJ126 3pcs. for each

[2] Test Condition

Vin: 12.0[V]
 Vbr/ADIM: 0[V]
 Load: 240[ohm]
 Power supply: PAR180A (KIKUSUI)

[3] Result

The test result is shown on the next page. There was no problem.
 The measurement condition and Instrument depends on the following.

Measurement Condition

Vin: 12.0[V]
 Vbr/ADIM: 0[V]
 Load: 240[ohm]
 Ambient temp: 25[degC]

Measuring Instrument

Power supply: PAR160A(KIKUSUI) or equivalent
 Input DC current meter: R6841 (ADVANTEST) or equivalent
 Output DC current meter: 187 (FLUKE) or equivalent
 Frequency counter: 187 (FLUKE) or equivalent

[4] Test Item

Item	Condition	Judgement Standard
High Temperature Continuous Operation	85degC 500hrs.	Electrical and appearance should be in the spec.
Heat Shock	-40degC <-> 85degC 30min./each 100cycles	
Humidity Environment Off and on Operation	60degC 90%R.H. On 1hr / Off 3hrs. 500cycles.	
Vibration	5~10Hz Amplitude 10mm 10~200Hz Accerarated Verocity 21.6m/s ² (2.2G) Log Sweep :10min. X,Y,Z direction 60min/each total 3hrs.	
Shock	588m/s ² (60G) 11ms Half-sine wave once each axis X,Y,Z,-X,-Y,-Z total 6times	

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High Temperature Continuous Operation
0 Hr.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.71	200.40	138.39	138.19	138.05	140.58
2	1.73	193.50	139.17	139.01	136.11	138.19
3	1.64	197.50	137.67	132.46	130.95	133.55

500 Hrs.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.74	200.30	138.21	138.04	137.75	140.09
2	1.74	193.30	139.19	139.44	136.19	137.85
3	1.67	197.50	137.94	133.41	131.66	133.62

Heat Shock
0 cyc.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.79	193.90	145.98	146.79	143.55	144.65
2	1.78	194.30	144.02	143.61	139.54	141.93
3	1.77	198.60	142.86	145.12	143.90	138.78

100 cyc.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.83	194.10	146.23	147.23	143.39	145.02
2	1.78	194.40	144.38	143.68	139.66	141.54
3	1.78	198.80	143.46	145.70	144.05	138.74

Humidity Environment Off and on Operation
0 cyc.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.74	195.60	141.79	142.49	140.05	139.54
2	1.68	194.40	136.03	137.11	135.12	136.92
3	1.70	195.10	140.33	138.89	138.85	134.97

500 cyc.

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.77	195.60	142.09	143.12	140.73	139.85
2	1.70	194.50	136.18	137.17	135.39	137.23
3	1.72	195.20	140.46	139.06	138.70	135.09

Vibration
before

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.75	193.10	141.81	141.01	141.46	141.24
2	1.64	196.00	134.56	134.52	133.03	130.51
3	1.67	197.80	136.84	136.99	134.38	136.04

after

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.75	193.10	141.47	140.71	140.94	140.71
2	1.65	196.00	134.45	134.54	133.06	130.43
3	1.67	197.90	136.55	136.91	134.42	135.89

Shock
before

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.75	193.10	141.81	141.01	141.46	141.24
2	1.64	196.00	134.56	134.52	133.03	130.51
3	1.67	197.80	136.84	136.99	134.38	136.04

after

S.No.	lin (A)	F (Hz)	lout1 (mA)	lout2 (mA)	lout3 (mA)	lout4 (mA)
1	1.77	193.10	141.82	141.05	141.24	141.00
2	1.66	195.90	134.42	134.39	132.76	130.04
3	1.69	197.90	136.87	137.09	134.49	135.94

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