



Reliability Report – 78L05

Linear Voltage Regulator - Positive fixed 5V output, 100mA output current

MIL-PRF-38534 CLASS K QUALIFICATION DATAPACK

Performed by Tandex Test Labs



TANDEX

15849 Business Center Drive, Irwindale, CA 91706, U.S.A.

Phone (626) 962-7166, Fax (626) 960-6896

www.tandexlabs.com

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- Scanning Electron Microscopy (SEM) analysis.





MIL-PRF-38534 CLASS K DATAPACK

Certificate of Conformance



TANDEX TEST LABS, INC.

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http://www.tandexlabs.com

e-mail: via web site

Certificate of Conformance

CUSTOMER:	SILICON SUPPLIES LIMITED	DATE: March 15, 2019
	47 WHERRY ROAD NORWICH, NR1, 1WS UNITED KINGDOM VAT GB#114 3513 56	
TEST REPORT:	DDS-101-21-A	QUANTITY RECEIVED: 30 DIE
P.O. NUMBER:	SS139	QUANTITY REQUIRED: 10/5/8
DESCRIPTION:	VOLTAGE REGULATOR	QUANTITY PROCESSED: 17
PART NUMBER(S):	78L05	QUANTITY PASSED: 17
P/N: AS RECEIVED / MFG. PART NUMBER:	78L05	QUANTITY FAILED: 0
LOT / DATE CODE:	1810 LOT# 8571 WF21	
MANUFACTURE: CAGE CODE:	SILICON SUPPLIES	QUANTITY SHIPPING: 17*
		INCLUDES: 10 PROCESS ACCEPT 2 SPARES 5 BOND PULL SAMPLES
TANDEX CAGE CODE:	1FE65	**8 DIE TRANSFERRED TO DDS-101-21-W FOR SEM.

METHOD OF TESTING: MIL-PRF-38534 CL. K, MIL-STD-883

I hereby certify that the subject components have been processed and inspected in accordance with instructions with specifications referenced in your purchase order. Physical records and/or data pertinent to applicable military, proprietary, and/or commercial specifications are on file and available upon request for inspection at this facility.



Linda S. Sepulveda
QUALITY ASSURANCE





MIL-PRF-38534 CLASS K DATAPACK

Process Flow Chart + Mechanical Test Results



TANDEX TEST LABS INC.

QMF22B

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-21-A REV. 1

CUSTOMER: DIE DEVICES P.O. NUMBER: SS139
 PART NUMBER: 78L05 P/N AS RECEIVED: 78L05
 PART TYPE: VOLTAGE REGULATOR DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
 DUE DATE: 7/12/18 JOB NUMBER: DDS-101-21-A
 LDC AS RECEIVED: 1810 LOT# 8571 WF21 QUANTITY RECEIVED: 30 (DIE) *15
 QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES QUANTITY REQUIRED: 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

01	FLO	P-1015 P-1223	FLOW PREPARED BY: <u>LSS</u> ON: <u>3/29/18</u> CONTRACTUAL AGREEMENT REVIEW Y N NOT SPECIFIED <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Q-CLAUSES <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> DPAS <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> DFAR <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> ITAR <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> OTHER SPECIFIED							
02	QCI		TANDEX QUALITY CONTROL INSPECTION. FLOW APPROVED BY: <u>JMI</u> ON: <u>3/29/18</u>							#7
03	RCV	P-1070	VERIFY PART NUMBER. ENTER INTO INCOMING LOG. X CUSTOMER COUNT	30				3/29/18		
SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.		
04	VIS	P-1041	PERFORM 100% DIE VISUAL PER MIL-STD-883 METHOD 2010 AND MIL-PRF-38534 PARA C.3.3.2. * RECEIVED ADDITIONAL DIE EQUIPMENT USED: <u>OLYMPUS</u> ASSET #: <u>20091</u>	*15 30	0	15	7/16/18	TTL 4		
ESD MAT DUE DATE:										
7/27/18										
05	ASSY	P-1029	PACKAGE SUFFICIENT DEVICES FOR CLASS K ELEMENT EVALUATION / ELECTRICAL AND BOND PULL PER MIL-PRF-38534 REFERENCE DIE GEOMETRY FOR ORIENTATION AND PIN - OUTS. DIE ATTACH: *CONNECT CHIP BACK TO SCREENING EUTETIC GROUND PER PG.2 OF DWG 78L05 BOND PULL SEM Lot#: <u>149555</u> Exp. Date: <u>N/A</u> TRANSFER TO DDS-101-21-W MIL-STD-883 METHOD 2018 * Package Type: <u>8-PIN DIP</u> <u>70-5 LA</u>	10+2 5 8	Q	10+2	7/19/18	TTL 30		
ESD MAT DUE DATE:										
7/27/18										
		P-4010	WIRE BOND: Utilize 1 Mil Au Wire (.001) 1 Mil Au bonder <u>MECH-EL</u> Asset #: <u>20060</u> Gold Wire: Lot#: <u>9003011960</u> Exp. Date: <u>3/16/2020</u>	10+2 LA	Q	10+2	7/23/18	TTL 30		

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15849 BUSINESS CENTER DRIVE, IRVINDALE, CA. 91706 PH: (626)962-7166 FAX: (626) 960-6896

PROCESS FLOW CHART

FLOW NUMBER: DDS-101-21-A REV. 1

CUSTOMER: DIE DEVICES P.O. NUMBER: SS139
 PART NUMBER: 78L05 P/N AS RECEIVED: 78L05
 PART TYPE: VOLTAGE REGULATOR DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
 DUE DATE: 7/12/18 JOB NUMBER: DDS-101-21-A
 LDC AS RECEIVED: 1810 LOT# 8571 WF21 QUANTITY RECEIVED: 30 (DIE)
 QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES QUANTITY REQUIRED: 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.	
06	VIS		PERFORM 100% INTERNAL VISUAL PER MIL-STD-883 METHOD 2010 & MIL-PRF-38534 C.3.3.3, C.3.3.4.2. EQUIPMENT USED: <u>NIKON SMZ645</u> ASSET #: <u>30663</u>	10+2	0	10+2	7/23/18	TTL 30	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>7/27/18</u> </div>							
07	SEAL		SEAL DEVICES VACUUM BAKE: Pre Seal Bake Time: Temp: <u>125°C</u> Time: <u>24 hrs</u> Actual time in: <u>8:45am - 7/23/18</u> Actual time out: <u>9:10am - 7/24/18</u> FURNACE LDC STAMP Actual temp: <u>125°C</u>	10+2	0	10+2	7/24/18	TTL 30	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>7/27/18</u> </div>							
08	ELEC		PERFORM 100% ELECTRICAL VERIFICATION TEST PER MFG DATA SHEET AND MIL-PRF-38534 @ AMBIENT OPERATING TEMPERATURE GO / NO GO EQUIPMENT USED: <u>UTS 2020</u> ASSET#: <u>20013</u> +25°C TEST FIXTURE: <u>#5</u> SOFTWARE ID: <u>578L05</u> REV <u>N/A</u>	10+2	0	10+2	7/25/18	TTL 13	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>7/27/18</u> </div>							
09	TEMP		PERFORM TEMPERATURE CYCLING PER MIL-STD-883 METHOD 1010 CONDITION C & MIL-PRF-38534 C.3.3.3. TEN (10) CYCLES TA = -65°C +0/-10 to +150°C +15/-0 10 MINUTES AT EXTREMES	10+2	0	10+2	7/25/18 10:10AM	TTL 48	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>7/28/18</u> </div>							
10	ACCE		PERFORM CONSTANT ACCELERATION PER MIL-PRF-38534 MIL-STD-883 METHOD 2001. Y1 DIRECTION ONLY @ 3000 G's (min) EQUIPMENT USED: <u>TRIO Tech</u> ASSET #: <u>30240</u>	10+2	0	10+2	7/26/18	TTL 52	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>7/28/18</u> </div>							
11	SER		SERIALIZE S/N: <u>01-12</u> <u>01-10</u>	10+2	0	10+2	7/31/18	TTL 33	
		<div style="border: 1px solid black; padding: 2px;"> ESD MAT DUE DATE: <u>8/27/18</u> </div>							

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-21-A REV. 1

CUSTOMER: DIE DEVICES P.O. NUMBER: SS139
 PART NUMBER: 78L05 P/N AS RECEIVED: 78L05
 PART TYPE: VOLTAGE REGULATOR DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
 DUE DATE: 7/12/18 JOB NUMBER: DDS-101-21-A
 LDC AS RECEIVED: 1810 LOT# 8571 WF21 QUANTITY RECEIVED: 30 (DIE)
 QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES QUANTITY REQUIRED: 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEP	DATE	INSP.
12	ELEC		PERFORM 100% ELECTRICAL VERIFICATION PER MFG DATA SHEET3 AND MIL-PRF-38534 C.3.3.4.3 @ AMBIENT , HIGH AND LOW OPERATING TEMPERATURES. READ AND RECORD. STATIC AND FUNCTIONAL TESTS +25°C -55°C +125°C EQUIPMENT USED: <u>LTS 2020</u> ASSET#: <u>20013</u> TEST FIXTURE: <u>5</u> SOFTWARE ID: <u>78L05</u> REV <u>N/A</u> TEMPERATURE SOAK <u>10</u> SEC.	12 12 12	0 0 0	12 12 12	8/1/18 8/1/18 8/1/18	TTL 27 TTL 27 TTL 27
13	BI		PERFORM BURN IN PER BURN IN CIRCUIT PER FIGURE 1 OF DWG# 1026-16668, AND MIL-STD 883 METHOD 1015. TA = 125°C (min) T = 240 HRS (min) BURN-IN BOARD # / DESC: <u>15133</u> BURN-IN OVEN #: <u>21</u>	12 12	0 0	12 12	8/2/18 6:00 AM 8/13/18 5:40 AM	TTL 13 TTL 13
14	ELEC		PERFORM POST BURN IN ELECTRICAL VERIFICATION PER MFG DATA SHEET AND MIL-PRF-38534 C.3.3.4.3 @ AMBIENT, HIGH AND LOW OPERATING TEMPERATURES. READ AND RECORD. STATIC AND FUNCTIONAL TESTS +25°C -55°C +125°C TEST +25°C WITHIN 96 HOURS EQUIPMENT USED: <u>LTS 2020</u> ASSET#: <u>20013</u> TEST FIXTURE: <u>5</u> SOFTWARE ID: <u>78L05</u> REV <u>N/A</u> TEMPERATURE SOAK <u>10</u> SEC.	12 12 12	0 0 0	12 12 12	8/13/18 8/13/18 8/13/18	TTL 13 TTL 13 TTL 13
15	ER		PER PO REQUIREMENTS: REVIEW AT POST 240 HR. BURN-IN EMAIL: <u>ben.white@diodevices.com</u> POST 240 HR BURN-IN ELECTRICAL TEST DATA. HOLD FOR APPROVAL TO PROCEED DATE SENT: <u>8/13/18</u>				8/13/18	QA TANDEX 5

ESD MAT DUE DATE:
8/27/18

ESD MAT DUE DATE:
8/27/18

ESD MAT DUE DATE:
8/27/18

TANDEX TEST LABS
 BURN - IN MONITOR SHEET

PAGE 1 OF 1

JOB NUMBER DDS-101-21-A

TEMPERATURE TA = +125°C Min

PART NUMBER 78205

TEMP. METER # 31368

DATE CODE 1810 LOT # 8571 WJ21

VOLTAGE VIN = +16VDC

BURN-IN TIME 240 hrs Min

VOLT METER# 31223

ΘJC = N/A

POWER SUPPLY# 31593

BOARD# 15133

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
8/2/18	6:00AM	VIN = +16VDC	IIN = .03A	127.6°C	CM	
8/3/18	6:45AM	VIN = +16VDC	IIN = .03A	127.3°C	CM	
8/6/18	6:00AM	VIN = +16VDC	IIN = .03A	126.1°C	CM	
8/7/18	8:35AM	VIN = +16VDC	IIN = .03A	125.5°C	CM	
8/8/18	6:00AM	VIN = +16VDC	IIN = .03A	126.2°C	CM	
8/9/18	6:30AM	VIN = +16VDC	IIN = .03A	126.0°C	CM	
8/10/18	6:45AM	VIN = +16VDC	IIN = .03A	125.7°C	CM	
8/13/18	5:40AM	VIN = +16VDC	IIN = .03A	125.6°C	CM	

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-21-A REV. 1

CUSTOMER: DIE DEVICES P.O. NUMBER: SS139
 PART NUMBER: 78L05 P/N AS RECEIVED: 78L05
 PART TYPE: VOLTAGE REGULATOR DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
 DUE DATE: 7/12/18 JOB NUMBER: DDS-101-21-A
 LDC AS RECEIVED: 1810 LOT# 8571 WF21 QUANTITY RECEIVED: 30 (DIE)
 QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES QUANTITY REQUIRED: 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
16	SSL		PERFORM STEADY STATE LIFE TEST PER MIL-PRF-38534 AND MIL-STD 883 METHOD 1005. TA = 125°C (min) T = 1000 HRS (min) DATE IN: 8/20/18 TIME IN: 6:00AM DATE OUT: 10/11/18 TIME OUT: 6:00AM BURN-IN BOARD # / DESC: 15133 BURN-IN OVEN #: 21	12	0	12	8/20/18 6:00AM	TTL 13
				12	0	12	10/11/18 6:00AM	TTL 13
17	ELEC		PERFORM POST STEADY STATE LIFE ELECTRICAL VERIFICATION PER MFG DATA SHEET AND MIL-PRF-38534 C.3.3.4.3. @ AMBIENT, HIGH AND LOW OPERATING TEMPERATURE. READ AND RECORD. STATIC AND FUNCTIONAL TESTS +25°C -55°C +125°C TEST +25°C WITHIN 96 HOURS EQUIPMENT USED: LTS 2020 ASSET#: 24013 TEST FIXTURE: #15 SOFTWARE ID: 78L05 REV N/A	12	0	12	10/2/18	TTL 52
				12	0	12	10/2/18	TTL 52
				12	0	12	10/2/18	TTL 52
18	DBP		PERFORM WIRE BOND PULL PER MIL-STD-883 METHOD 2011, & MIL-PRF-38534 C.3.3.3, C3.3.5. TEN (10) WIRES, *DO NOT USE ELECTRICAL TEST SAMPLES* EQUIPMENT USED: DAGE ASSET #: 30785	5	0	5	7/19/18	TTL
19	SEM		PULLED 8 DEVICES AT SEQ. 05 AND TRANSFERRED TO: DDS-101-21-W	8		8	7/11/18	QA TANDEX 5

ESD MAT DUE DATE:
10/27/18

ESD MAT DUE DATE:
10/27/18

TANDEX TEST LABS
 BURN-IN MONITOR SHEET

JOB NUMBER DDS-101-21-A

TEMPERATURE TA = +125°C Min

PART NUMBER 78L05

TEMP. METER # 31368

DATE CODE 1810 LOT # 8571 WF21

VOLTAGE VIN = +16VDC

BURN-IN TIME 1000hrs Min

VOLT METER# 31223

ΘJC = N/A

POWER SUPPLY# 31593

BOARD# 15133

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
8/20/18	6:00AM	VIN = +16VDC	IIN = .03A	125.4°C	CM	
8/21/18	7:05AM	VIN = +16VDC	IIN = .03A	125.5°C	CM	
8/22/18	9:55AM	VIN = +16VDC	IIN = .03A	125.9°C	CM	
8/23/18	7:00AM	VIN = +16VDC	IIN = .03A	125.3°C	CM	
8/24/18	6:45AM	VIN = +16VDC	IIN = .03A	125.6°C	CM	
8/27/18	5:50AM	VIN = +16VDC	IIN = .03A	125.8°C	CM	
8/28/18	10:20AM	VIN = +16VDC	IIN = .03A	125.9°C	CM	
8/29/18	6:15AM	VIN = +16VDC	IIN = .03A	126.4°C	CM	
8/30/18	6:00AM	VIN = +16VDC	IIN = .03A	125.8°C	CM	
8/31/18	5:30AM	VIN = +16VDC	IIN = .03A	126.3°C	CM	

TANDEX TEST LABS
 BURN - IN MONITOR SHEET

PAGE 2 OF 4

JOB NUMBER DDS-101-21-A

TEMPERATURE TA = +125°C Min

PART NUMBER 78L05

TEMP. METER # 31368

DATE CODE 1810 LOT # 8571 WF21

VOLTAGE VIN = +16VDC

BURN-IN TIME 1000hrs Min

VOLT METER# 31223

ΘJC = N/A

POWER SUPPLY# 31593

BOARD# 15133

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
9/3/18	NO	DATA	TAKEN			
9/4/18	6:00AM	VIN = +16VDC	IIN = .03A	124.8°C	CM	
9/5/18	7:30AM	VIN = +16VDC	IIN = .03A	125.5°C	CM	
9/6/18	10:00AM	VIN = +16VDC	IIN = .03A	126.0°C	CM	
9/7/18	5:50AM	VIN = +16VDC	IIN = .03A	126.6°C	CM	
9/10/18	7:00AM	VIN = +16VDC	IIN = .03A	126.2°C	CM	
9/11/18	6:00AM	VIN = +16VDC	IIN = .03A	126.0°C	CM	
9/12/18	NO	DATA	TAKEN			
9/13/18	9:05AM	VIN = +16VDC	IIN = .03A	125.8°C	CM	
9/14/18	8:55AM	VIN = +16VDC	IIN = .03A	126.5°C	CM	

TANDEX TEST LABS
 BURN-IN MONITOR SHEET

PAGE 3 OF 4

JOB NUMBER DDS-101-21-A

TEMPERATURE TA = +125°C Min

PART NUMBER 78L05

TEMP. METER # 31368

DATE CODE 1810 LOT # 8571 WF21

VOLTAGE VIN = +16VDC

BURN-IN TIME 1000hrs Min

VOLT METER# 31223

ΘJC = N/A

POWER SUPPLY# 31593

BOARD# 15133

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
2/17/18	8:00AM	VIN = +16VDC	IIN = .03A	126.4°C	CM	
9/18/18	5:50AM	VIN = +16VDC	IIN = .03A	126.6°C	CM	
9/19/18	5:30AM	VIN = +16VDC	IIN = .03A	126.2°C	CM	
9/20/18	7:30AM	VIN = +16VDC	IIN = .03A	126.3°C	CM	
9/21/18	NO	DATA	TAKEN			
9/24/18	NO	DATA	TAKEN			
9/25/18	5:30AM	VIN = +16VDC	IIN = .03A	126.2°C	CM	
9/26/18	6:00AM	VIN = +16VDC	IIN = .03A	126.3°C	CM	
9/27/18	6:30AM	VIN = +16VDC	IIN = .03A	126.7°C	CM	

TANDEX TEST LABS
 BURN - IN MONITOR SHEET

JOB NUMBER DDS-101-21-A

TEMPERATURE TA = +125°C Min

PART NUMBER 78L05

TEMP. METER # 31368

DATE CODE 1810 LOT # 8571 WF21

VOLTAGE VIN = +16VDC

BURN-IN TIME 1000hrs Min

VOLT METER# 31223

ΘJC = N/A

POWER SUPPLY# 31593

BOARD# 15133

OVEN# 21

DATE	TIME	VOLTAGE	CURRENT	TEMP.	INITIAL	COMMENTS
9/28/18	6:58 AM	VIN = +16VDC	IIN = .03A	127.2°C	CM	
10/1/18	6:00 AM	VIN = +16VDC	IIN = .03A	127.7°C	CM	

TANDEX TEST LABS TTL# DDS-101-21-A

BOND PULL

BOND STRENGTH TESTING

TTL Job No. DDS-101-21-A	Part Number 78L05	Part Type VOLTAGE REGULATOR	Date July 19, 2018
Lot Date Code LOT# 8571 W# 21 1810	Sample Qty. 5	Serial Numbers 11-15	Test Specifications Mil-Std-883 Method 2011
Misc.	Qty Accept 5	Qty Reject 0	Suspect 0

WIRE TYPE Au	PACKAGE/POST Au	BOND TYPE BALL BOND
DIE METALIZATION Al	WIRE SIZE 0.001	MINIMUM PULL STRENGTH 2.5gm

S/N 11			S/N 12			S/N 13			S/N 14			S/N 15			S/N		
WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE	WIRE NO	FORCE	CODE
1	5.5	G	1	6.5	G	1	7.5	G	1	6.0	G	1	95	J	1		
2	6.5	G	2	8.0	G	2	9.0	G	2	5.5	G	2	7.0	G	2		
3			3			3			3			3			3		
4			4			4			4			4			4		
5			5			5			5			5			5		

CODE INDEX

- A. NO BREAKS UP TO _____gms.
- B. BOND LIFTS FROM DIE.
- C. BOND LIFTS FROM POST.
- D. WIRE BREAKS AT SUBSTRATE/HEAL.
- E. BOND REMOVES UNDERLYING METALLIZATION.
- F. NO CONNECTION.
- G. WIRE BREAKS AT DIE/HEAL.
- H. WIRE BREAKS AT POST/HEAL.
- J. WIRE BREAKS AT SPAN.
- X. BOND DAMAGE PRIOR TO TESTING.



TECHNICIAN STAMP: _____

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PROCESS FLOW CHART

FLOW NUMBER: DDS-101-21-A REV. 1

CUSTOMER: DIE DEVICES P.O. NUMBER: SS139
 PART NUMBER: 78L05 P/N AS RECEIVED: 78L05
 PART TYPE: VOLTAGE REGULATOR DRAWING: MIL-PRF-38534 CL K, MIL-STD-883
 DUE DATE: 7/12/18 JOB NUMBER: DDS-101-21-A
 LDC AS RECEIVED: 1810 LOT# 8571 WF21 QUANTITY RECEIVED : 30 (DIE)
 QUOTE NUMBER: DDS14267-1 MFG: SILICON SUPPLIES QUANTITY REQUIRED : 10/5/8

CAUTION: ESD REFER TO TTL DRAWING #P1025

SEQ	PROC	REF #	DESCRIPTION	QTY	REJ	ACCEPT	DATE	INSP.
20	QCI	P-1073	TANDEX QUALITY CONTROL INSPECTION. QCI TO VERIFY CAR IN SEQ. 01 IS COMPLIANT	17	Ø	17	10/4/18	QA TANDEX 5
21	PKG		USE ORIGINAL OR TANDEX PACKAGING.	17	Ø	17	10/4/18	QA TANDEX 5
22	QAR	P-1213	TANDEX QUALITY ASSURANCE REVIEW. SHIP VIA: *INCLUDES, 5 BOND PULL SAMPLES 10 PROCESS ACCEPT 2 SPARES SHIP / BILL TO: DIE DEVICES 47 WHERRY ROAD NORWICH, NRI, IWS UNITED KINGDOM VAT GB#114 3513 56 ** 8 PCS TRANSFERRED TO DDS-101-21-W FOR SEM	17			10/4/18	QA TANDEX 5



MIL-PRF-38534 CLASS K DATAPACK

Pre Burn-In Test Results at -55°C



JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 1 TESTING	\$78L05 @ -55C	08/01/18 12:40:46
T# 1	5.031 V VOUT	[4.75 TO 5.25 V]
T# 2	5.023 V VOUT	[4.75 TO 5.25 V]
T# 3	5.041 V VOUT	[4.75 TO 5.25 V]
T# 4	5.036 V VOUT	[4.75 TO 5.25 V]
T# 5	5.032 V VOUT	[4.75 TO 5.25 V]
T# 6	5.021 V VOUT	[4.75 TO 5.25 V]
T# 7	2.779 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1224 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 2 TESTING	\$78L05 @ -55C	08/01/18 12:41:16
T# 1	4.981 V VOUT	[4.75 TO 5.25 V]
T# 2	4.975 V VOUT	[4.75 TO 5.25 V]
T# 3	4.992 V VOUT	[4.75 TO 5.25 V]
T# 4	4.988 V VOUT	[4.75 TO 5.25 V]
T# 5	4.983 V VOUT	[4.75 TO 5.25 V]
T# 6	4.976 V VOUT	[4.75 TO 5.25 V]
T# 7	2.657 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1049 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 3 TESTING	\$78L05 @ -55C	08/01/18 12:43:54
T# 1 5.008 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.019 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.016 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.011 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.779 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 4 TESTING	\$78L05 @ -55C	08/01/18 12:44:16
T# 1	5.009 V VOUT	[4.75 TO 5.25 V]
T# 2	5.004 V VOUT	[4.75 TO 5.25 V]
T# 3	5.022 V VOUT	[4.75 TO 5.25 V]
T# 4	5.018 V VOUT	[4.75 TO 5.25 V]
T# 5	5.015 V VOUT	[4.75 TO 5.25 V]
T# 6	5.007 V VOUT	[4.75 TO 5.25 V]
T# 7	2.779 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1049 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 5 TESTING	\$78L05 @ -55C	08/01/18 12:45:01
T# 1 5.014 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.009 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.027 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.023 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.019 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.011 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.657 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 6 TESTING	\$78L05 @ -55C	08/01/18 12:45:50
T# 1 5.004 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.998 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.015 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.011 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.007 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.998 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.657 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 7 TESTING	\$78L05 @ -55C	08/01/18 12:46:52
T# 1	5.026 V VOUT	[4.75 TO 5.25 V]
T# 2	5.019 V VOUT	[4.75 TO 5.25 V]
T# 3	5.037 V VOUT	[4.75 TO 5.25 V]
T# 4	5.032 V VOUT	[4.75 TO 5.25 V]
T# 5	5.029 V VOUT	[4.75 TO 5.25 V]
T# 6	5.017 V VOUT	[4.75 TO 5.25 V]
T# 7	2.779 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1049 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 8 TESTING	\$78L05 @ -55C	08/01/18 12:47:32
T# 1	5.014 V VOUT	[4.75 TO 5.25 V]
T# 2	5.007 V VOUT	[4.75 TO 5.25 V]
T# 3	5.025 V VOUT	[4.75 TO 5.25 V]
T# 4	5.020 V VOUT	[4.75 TO 5.25 V]
T# 5	5.016 V VOUT	[4.75 TO 5.25 V]
T# 6	5.007 V VOUT	[4.75 TO 5.25 V]
T# 7	2.657 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1049 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 9 TESTING	\$78L05 @ -55C	08/01/18 12:48:17
T# 1 5.005 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.000 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.017 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.015 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.010 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.004 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.657 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1224 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 10 TESTING	\$78L05 @ -55C	08/01/18 12:49:09
T# 1 5.012 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.006 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.024 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.020 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.017 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.006 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.657 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1224 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 11 TESTING	\$78L05 @ -55C	08/01/18 12:49:47
T# 1 5.010 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.004 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.021 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.017 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.012 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.004 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.779 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1224 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 12 TESTING	\$78L05 @ -55C	08/01/18 12:50:49
T# 1 5.016 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.010 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.028 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.024 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.020 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.012 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.657 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Pre Burn-In Test Results at 25°C



JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 1 TESTING	\$78L05 @ 25C	08/01/18 12:06:35
T# 1	5.048 V VOUT	[4.8 TO 5.2 V]
T# 2	5.049 V VOUT	[4.75 TO 5.25 V]
T# 3	5.043 V VOUT	[4.75 TO 5.25 V]
T# 4	5.061 V VOUT	[4.75 TO 5.25 V]
T# 5	5.057 V VOUT	[4.75 TO 5.25 V]
T# 6	5.054 V VOUT	[4.75 TO 5.25 V]
T# 7	5.044 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	0.00 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.78 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	59.16 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 2 TESTING	\$78L05 @ 25C	08/01/18 12:07:20
T# 1	5.005 V VOUT	[4.8 TO 5.2 V]
T# 2	5.006 V VOUT	[4.75 TO 5.25 V]
T# 3	5.001 V VOUT	[4.75 TO 5.25 V]
T# 4	5.020 V VOUT	[4.75 TO 5.25 V]
T# 5	5.016 V VOUT	[4.75 TO 5.25 V]
T# 6	5.013 V VOUT	[4.75 TO 5.25 V]
T# 7	5.003 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.44 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.44 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	0.00 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.30 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.74 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.1050 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 3 TESTING	\$78L05 @ 25C	08/01/18 12:07:43
T# 1	5.019 V VOUT	[4.8 TO 5.2 V]
T# 2	5.021 V VOUT	[4.75 TO 5.25 V]
T# 3	5.016 V VOUT	[4.75 TO 5.25 V]
T# 4	5.036 V VOUT	[4.75 TO 5.25 V]
T# 5	5.032 V VOUT	[4.75 TO 5.25 V]
T# 6	5.029 V VOUT	[4.75 TO 5.25 V]
T# 7	5.019 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.44 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	0.00 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.78 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	58.93 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 4 TESTING	\$78L05 @ 25C	08/01/18 12:08:04
T# 1	5.022 V VOUT	[4.8 TO 5.2 V]
T# 2	5.024 V VOUT	[4.75 TO 5.25 V]
T# 3	5.018 V VOUT	[4.75 TO 5.25 V]
T# 4	5.038 V VOUT	[4.75 TO 5.25 V]
T# 5	5.034 V VOUT	[4.75 TO 5.25 V]
T# 6	5.031 V VOUT	[4.75 TO 5.25 V]
T# 7	5.022 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	-.40 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.38 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.65 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 5 TESTING	\$78L05 @ 25C	08/01/18 12:08:22
T# 1	5.029 V VOUT	[4.8 TO 5.2 V]
T# 2	5.029 V VOUT	[4.75 TO 5.25 V]
T# 3	5.024 V VOUT	[4.75 TO 5.25 V]
T# 4	5.043 V VOUT	[4.75 TO 5.25 V]
T# 5	5.039 V VOUT	[4.75 TO 5.25 V]
T# 6	5.035 V VOUT	[4.75 TO 5.25 V]
T# 7	5.027 V VOUT	[4.75 TO 5.25 V]
T# 8	2.559 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	-.40 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.22 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	59.49 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 6 TESTING	\$78L05 @ 25C	08/01/18 12:09:04
T# 1	5.026 V VOUT	[4.8 TO 5.2 V]
T# 2	5.029 V VOUT	[4.75 TO 5.25 V]
T# 3	5.022 V VOUT	[4.75 TO 5.25 V]
T# 4	5.042 V VOUT	[4.75 TO 5.25 V]
T# 5	5.036 V VOUT	[4.75 TO 5.25 V]
T# 6	5.035 V VOUT	[4.75 TO 5.25 V]
T# 7	5.023 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-13.64 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	0.00 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	6.66 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.46 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.1050 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 7 TESTING	\$78L05 @ 25C	08/01/18 12:09:31
T# 1	5.049 V	VOUT [4.8 TO 5.2 V]
T# 2	5.050 V	VOUT [4.75 TO 5.25 V]
T# 3	5.043 V	VOUT [4.75 TO 5.25 V]
T# 4	5.062 V	VOUT [4.75 TO 5.25 V]
T# 5	5.057 V	VOUT [4.75 TO 5.25 V]
T# 6	5.054 V	VOUT [4.75 TO 5.25 V]
T# 7	5.044 V	VOUT [4.75 TO 5.25 V]
T# 8	2.682 MA	BIAS CURRENT [-6 TO 6 MA]
T# 9	-13.64 MV	LINE REGULATION [-150 TO 150 MV]
T# 10	-11.63 MV	LINE REGULATION [-100 TO 100 MV]
T# 11	-.40 MV	LOAD REGULATION [-60 TO 60 MV]
T# 12	5.62 MV	LOAD REGULATION [-30 TO 30 MV]
T# 13	59.39 DB	RIPPLE REJECTION [41 TO 500 DB]
T# 14	-.1050 MA	I BIAS CHANGE (VS) [-1.5 TO 1.5 MA]
T# 15	.0056 MA	I BIAS CHANGE (LOAD) [-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 8 TESTING	\$78L05 @ 25C	08/01/18 12:10:09
T# 1	5.010 V VOUT	[4.8 TO 5.2 V]
T# 2	5.030 V VOUT	[4.75 TO 5.25 V]
T# 3	5.006 V VOUT	[4.75 TO 5.25 V]
T# 4	5.043 V VOUT	[4.75 TO 5.25 V]
T# 5	5.022 V VOUT	[4.75 TO 5.25 V]
T# 6	5.036 V VOUT	[4.75 TO 5.25 V]
T# 7	4.995 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.44 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.44 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	-.40 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	22.87 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.30 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.1050 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 9 TESTING	\$78L05 @ 25C	08/01/18 12:10:29
T# 1	5.026 V VOUT	[4.8 TO 5.2 V]
T# 2	5.026 V VOUT	[4.75 TO 5.25 V]
T# 3	5.021 V VOUT	[4.75 TO 5.25 V]
T# 4	5.040 V VOUT	[4.75 TO 5.25 V]
T# 5	5.036 V VOUT	[4.75 TO 5.25 V]
T# 6	5.033 V VOUT	[4.75 TO 5.25 V]
T# 7	5.023 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-11.63 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	-.40 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.06 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	59.26 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE	TESTING	\$78L05 @ 25C	08/01/18 12:10:53
T# 1	5.033 V	VOUT	[4.8 TO 5.2 V]
T# 2	5.035 V	VOUT	[4.75 TO 5.25 V]
T# 3	5.028 V	VOUT	[4.75 TO 5.25 V]
T# 4	5.048 V	VOUT	[4.75 TO 5.25 V]
T# 5	5.043 V	VOUT	[4.75 TO 5.25 V]
T# 6	5.041 V	VOUT	[4.75 TO 5.25 V]
T# 7	5.028 V	VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA	BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV	LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV	LINE REGULATION	[-100 TO 100 MV]
T# 11	-.40 MV	LOAD REGULATION	[-60 TO 60 MV]
T# 12	6.90 MV	LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.33 DB	RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 11 TESTING	\$78L05 @ 25C	08/01/18 12:11:17
T# 1	5.031 V VOUT	[4.8 TO 5.2 V]
T# 2	5.032 V VOUT	[4.75 TO 5.25 V]
T# 3	5.026 V VOUT	[4.75 TO 5.25 V]
T# 4	5.044 V VOUT	[4.75 TO 5.25 V]
T# 5	5.040 V VOUT	[4.75 TO 5.25 V]
T# 6	5.037 V VOUT	[4.75 TO 5.25 V]
T# 7	5.027 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-13.64 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-11.23 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	0.00 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.54 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	59.24 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 12 TESTING	\$78L05 @ 25C	08/01/18 12:11:42
T# 1	5.029 V VOUT	[4.8 TO 5.2 V]
T# 2	5.032 V VOUT	[4.75 TO 5.25 V]
T# 3	5.024 V VOUT	[4.75 TO 5.25 V]
T# 4	5.045 V VOUT	[4.75 TO 5.25 V]
T# 5	5.039 V VOUT	[4.75 TO 5.25 V]
T# 6	5.038 V VOUT	[4.75 TO 5.25 V]
T# 7	5.024 V VOUT	[4.75 TO 5.25 V]
T# 8	2.682 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.04 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.04 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	.40 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	8.02 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	60.32 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Pre Burn-In Test Results at +125°C



JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 1 TESTING	\$78L05 @ 125C	08/01/18 12:53:54
T# 1	5.066 V VOUT	[4.75 TO 5.25 V]
T# 2	5.059 V VOUT	[4.75 TO 5.25 V]
T# 3	5.082 V VOUT	[4.75 TO 5.25 V]
T# 4	5.075 V VOUT	[4.75 TO 5.25 V]
T# 5	5.073 V VOUT	[4.75 TO 5.25 V]
T# 6	5.060 V VOUT	[4.75 TO 5.25 V]
T# 7	2.534 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 2 TESTING	\$78L05 @ 125C	08/01/18 12:54:20
T# 1	5.033 V VOUT	[4.75 TO 5.25 V]
T# 2	5.027 V VOUT	[4.75 TO 5.25 V]
T# 3	5.050 V VOUT	[4.75 TO 5.25 V]
T# 4	5.045 V VOUT	[4.75 TO 5.25 V]
T# 5	5.043 V VOUT	[4.75 TO 5.25 V]
T# 6	5.032 V VOUT	[4.75 TO 5.25 V]
T# 7	2.412 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 3 TESTING	\$78L05 @ 125C	08/01/18 12:54:51
T# 1	5.047 V VOUT	[4.75 TO 5.25 V]
T# 2	5.041 V VOUT	[4.75 TO 5.25 V]
T# 3	5.065 V VOUT	[4.75 TO 5.25 V]
T# 4	5.059 V VOUT	[4.75 TO 5.25 V]
T# 5	5.057 V VOUT	[4.75 TO 5.25 V]
T# 6	5.045 V VOUT	[4.75 TO 5.25 V]
T# 7	2.534 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1049 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 4 TESTING	\$78L05 @ 125C	08/01/18 12:55:18
T# 1 5.045 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.039 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.061 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.056 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.054 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.043 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0874 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 5 TESTING	\$78L05 @ 125C	08/01/18 12:55:45
T# 1 5.063 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.058 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.081 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.076 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.073 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.063 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0874 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 6 TESTING	\$78L05 @ 125C	08/01/18 12:56:13
T# 1 5.046 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.040 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.062 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.057 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.055 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.044 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0874 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 7 TESTING	\$78L05 @ 125C	08/01/18 12:56:42
T# 1 5.062 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.054 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.077 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.070 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.070 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.055 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0700 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 8 TESTING	\$78L05 @ 125C	08/01/18 12:57:07
T# 1 5.046 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.040 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.062 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.057 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.055 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.043 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 9 TESTING	\$78L05 @ 125C	08/01/18 12:57:34
T# 1 5.039 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.026 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.054 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.043 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.047 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.022 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1049 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 10 TESTING	\$78L05 @ 125C	08/01/18 12:58:00
T# 1 5.050 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.036 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.065 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.053 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.058 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.034 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0874 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 11 TESTING	\$78L05 @ 125C	08/01/18 12:58:26
T# 1	5.049 V VOUT	[4.75 TO 5.25 V]
T# 2	5.043 V VOUT	[4.75 TO 5.25 V]
T# 3	5.064 V VOUT	[4.75 TO 5.25 V]
T# 4	5.059 V VOUT	[4.75 TO 5.25 V]
T# 5	5.057 V VOUT	[4.75 TO 5.25 V]
T# 6	5.046 V VOUT	[4.75 TO 5.25 V]
T# 7	2.534 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0874 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: ELECTRICAL VERIFICATION SEQ.#: 12

DEVICE 12 TESTING	\$78L05 @ 125C	08/01/18 12:58:50
T# 1 5.044 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.037 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.060 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.053 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.053 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.038 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.534 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0874 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Post Burn-In Test Results at -55°C



JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 1 TESTING	\$78L05 @ -55C	08/13/18 08:22:42
T# 1	5.004 V VOUT	[4.75 TO 5.25 V]
T# 2	5.000 V VOUT	[4.75 TO 5.25 V]
T# 3	5.018 V VOUT	[4.75 TO 5.25 V]
T# 4	5.015 V VOUT	[4.75 TO 5.25 V]
T# 5	5.010 V VOUT	[4.75 TO 5.25 V]
T# 6	5.003 V VOUT	[4.75 TO 5.25 V]
T# 7	2.795 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1226 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 2 TESTING	\$78L05 @ -55C	08/13/18 08:23:15
T# 1	4.967 V VOUT	[4.75 TO 5.25 V]
T# 2	4.962 V VOUT	[4.75 TO 5.25 V]
T# 3	4.980 V VOUT	[4.75 TO 5.25 V]
T# 4	4.978 V VOUT	[4.75 TO 5.25 V]
T# 5	4.971 V VOUT	[4.75 TO 5.25 V]
T# 6	4.965 V VOUT	[4.75 TO 5.25 V]
T# 7	2.795 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1401 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 3 TESTING	\$78L05 @ -55C	08/13/18 08:23:47
T# 1	4.996 V VOUT	[4.75 TO 5.25 V]
T# 2	4.991 V VOUT	[4.75 TO 5.25 V]
T# 3	5.009 V VOUT	[4.75 TO 5.25 V]
T# 4	5.007 V VOUT	[4.75 TO 5.25 V]
T# 5	5.001 V VOUT	[4.75 TO 5.25 V]
T# 6	4.994 V VOUT	[4.75 TO 5.25 V]
T# 7	2.795 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1226 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 4 TESTING	\$78L05 @ -55C	08/13/18 08:24:23
T# 1	4.997 V VOUT	[4.75 TO 5.25 V]
T# 2	4.992 V VOUT	[4.75 TO 5.25 V]
T# 3	5.010 V VOUT	[4.75 TO 5.25 V]
T# 4	5.008 V VOUT	[4.75 TO 5.25 V]
T# 5	5.002 V VOUT	[4.75 TO 5.25 V]
T# 6	4.995 V VOUT	[4.75 TO 5.25 V]
T# 7	2.795 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1226 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	0.0000 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]
PASS BIN 1		

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 5 TESTING	\$78L05 @ -55C	08/13/18 08:24:57
T# 1 4.991 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.986 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.001 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.995 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.989 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.672 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1401 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 6 TESTING	\$78L05 @ -55C	08/13/18 08:25:31
T# 1 4.989 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.984 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.000 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.994 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.987 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1226 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 7 TESTING	\$78L05 @ -55C	08/13/18 08:26:00
T# 1 5.002 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.996 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.015 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.012 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.006 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.000 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1051 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 8 TESTING	\$78L05 @ -55C	08/13/18 08:26:45
T# 1	4.999 V VOUT	[4.75 TO 5.25 V]
T# 2	4.993 V VOUT	[4.75 TO 5.25 V]
T# 3	5.010 V VOUT	[4.75 TO 5.25 V]
T# 4	5.007 V VOUT	[4.75 TO 5.25 V]
T# 5	5.000 V VOUT	[4.75 TO 5.25 V]
T# 6	4.993 V VOUT	[4.75 TO 5.25 V]
T# 7	2.795 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.1226 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 9 TESTING	\$78L05 @ -55C	08/13/18 08:27:19
T# 1 4.992 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.987 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.005 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.996 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.990 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1226 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 10 TESTING	\$78L05 @ -55C	08/13/18 08:27:53
T# 1 4.985 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.980 V	VOUT	[4.75 TO 5.25 V]
T# 3 4.999 V	VOUT	[4.75 TO 5.25 V]
T# 4 4.997 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.991 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.985 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1226 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 11 TESTING	\$78L05 @ -55C	08/13/18 08:28:28
T# 1 4.992 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.987 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.005 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.003 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.997 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.990 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1226 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 12 TESTING	\$78L05 @ -55C	08/13/18 08:29:03
T# 1 4.995 V	VOUT	[4.75 TO 5.25 V]
T# 2 4.989 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.008 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.005 V	VOUT	[4.75 TO 5.25 V]
T# 5 4.999 V	VOUT	[4.75 TO 5.25 V]
T# 6 4.992 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.795 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1226 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Post Burn-In Test Results at 25°C



JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 1 TESTING	\$78L05 @ 25C	08/13/18 08:06:09
T# 1	5.025 V VOUT	[4.8 TO 5.2 V]
T# 2	5.026 V VOUT	[4.75 TO 5.25 V]
T# 3	5.020 V VOUT	[4.75 TO 5.25 V]
T# 4	5.040 V VOUT	[4.75 TO 5.25 V]
T# 5	5.035 V VOUT	[4.75 TO 5.25 V]
T# 6	5.032 V VOUT	[4.75 TO 5.25 V]
T# 7	5.021 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.28 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-11.26 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	2.81 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	6.11 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	47.80 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 2 TESTING	\$78L05 @ 25C	08/13/18 08:07:03
T# 1	5.000 V VOUT	[4.8 TO 5.2 V]
T# 2	5.000 V VOUT	[4.75 TO 5.25 V]
T# 3	4.995 V VOUT	[4.75 TO 5.25 V]
T# 4	5.015 V VOUT	[4.75 TO 5.25 V]
T# 5	5.010 V VOUT	[4.75 TO 5.25 V]
T# 6	5.006 V VOUT	[4.75 TO 5.25 V]
T# 7	4.996 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.28 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.86 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	1.61 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.31 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	48.07 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 3 TESTING	\$78L05 @ 25C	08/13/18 08:07:25
T# 1	5.022 V VOUT	[4.8 TO 5.2 V]
T# 2	5.022 V VOUT	[4.75 TO 5.25 V]
T# 3	5.016 V VOUT	[4.75 TO 5.25 V]
T# 4	5.036 V VOUT	[4.75 TO 5.25 V]
T# 5	5.032 V VOUT	[4.75 TO 5.25 V]
T# 6	5.028 V VOUT	[4.75 TO 5.25 V]
T# 7	5.018 V VOUT	[4.75 TO 5.25 V]
T# 8	2.795 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.68 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.46 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	2.01 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.47 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	50.41 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 4 TESTING	\$78L05 @ 25C	08/13/18 08:08:25
T# 1	5.023 V VOUT	[4.8 TO 5.2 V]
T# 2	5.023 V VOUT	[4.75 TO 5.25 V]
T# 3	5.017 V VOUT	[4.75 TO 5.25 V]
T# 4	5.037 V VOUT	[4.75 TO 5.25 V]
T# 5	5.032 V VOUT	[4.75 TO 5.25 V]
T# 6	5.028 V VOUT	[4.75 TO 5.25 V]
T# 7	5.019 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.67 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.86 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	3.22 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.14 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	70.89 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 5 TESTING	\$78L05 @ 25C	08/13/18 08:08:57
T# 1	5.017 V VOUT	[4.8 TO 5.2 V]
T# 2	5.017 V VOUT	[4.75 TO 5.25 V]
T# 3	5.011 V VOUT	[4.75 TO 5.25 V]
T# 4	5.031 V VOUT	[4.75 TO 5.25 V]
T# 5	5.026 V VOUT	[4.75 TO 5.25 V]
T# 6	5.022 V VOUT	[4.75 TO 5.25 V]
T# 7	5.013 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.27 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.66 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	3.22 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.63 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	72.49 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 6 TESTING	\$78L05 @ 25C	08/13/18 08:09:17
T# 1	5.017 V VOUT	[4.8 TO 5.2 V]
T# 2	5.017 V VOUT	[4.75 TO 5.25 V]
T# 3	5.011 V VOUT	[4.75 TO 5.25 V]
T# 4	5.031 V VOUT	[4.75 TO 5.25 V]
T# 5	5.027 V VOUT	[4.75 TO 5.25 V]
T# 6	5.023 V VOUT	[4.75 TO 5.25 V]
T# 7	5.013 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.67 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.66 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	1.21 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.47 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	70.26 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 7 TESTING	\$78L05 @ 25C	08/13/18 08:09:37
T# 1	5.024 V VOUT	[4.8 TO 5.2 V]
T# 2	5.024 V VOUT	[4.75 TO 5.25 V]
T# 3	5.018 V VOUT	[4.75 TO 5.25 V]
T# 4	5.038 V VOUT	[4.75 TO 5.25 V]
T# 5	5.033 V VOUT	[4.75 TO 5.25 V]
T# 6	5.030 V VOUT	[4.75 TO 5.25 V]
T# 7	5.020 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.87 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.46 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	4.82 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.47 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	72.70 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 8 TESTING	\$78L05 @ 25C	08/13/18 08:09:58
T# 1	5.017 V VOUT	[4.8 TO 5.2 V]
T# 2	5.017 V VOUT	[4.75 TO 5.25 V]
T# 3	5.011 V VOUT	[4.75 TO 5.25 V]
T# 4	5.031 V VOUT	[4.75 TO 5.25 V]
T# 5	5.027 V VOUT	[4.75 TO 5.25 V]
T# 6	5.023 V VOUT	[4.75 TO 5.25 V]
T# 7	5.013 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.27 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.66 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	3.62 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.31 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	69.60 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 9 TESTING	\$78L05 @ 25C	08/13/18 08:10:17
T# 1	5.018 V VOUT	[4.8 TO 5.2 V]
T# 2	5.018 V VOUT	[4.75 TO 5.25 V]
T# 3	5.013 V VOUT	[4.75 TO 5.25 V]
T# 4	5.032 V VOUT	[4.75 TO 5.25 V]
T# 5	5.028 V VOUT	[4.75 TO 5.25 V]
T# 6	5.023 V VOUT	[4.75 TO 5.25 V]
T# 7	5.014 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.27 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-12.86 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	2.01 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.47 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	73.14 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.1051 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 10 TESTING	\$78L05 @ 25C	08/13/18 08:10:37
T# 1	5.017 V VOUT	[4.8 TO 5.2 V]
T# 2	5.017 V VOUT	[4.75 TO 5.25 V]
T# 3	5.011 V VOUT	[4.75 TO 5.25 V]
T# 4	5.031 V VOUT	[4.75 TO 5.25 V]
T# 5	5.027 V VOUT	[4.75 TO 5.25 V]
T# 6	5.022 V VOUT	[4.75 TO 5.25 V]
T# 7	5.013 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.27 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.66 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	2.41 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	4.98 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	70.13 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.1051 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 11 TESTING	\$78L05 @ 25C	08/13/18 08:10:59
T# 1	5.021 V VOUT	[4.8 TO 5.2 V]
T# 2	5.021 V VOUT	[4.75 TO 5.25 V]
T# 3	5.015 V VOUT	[4.75 TO 5.25 V]
T# 4	5.035 V VOUT	[4.75 TO 5.25 V]
T# 5	5.031 V VOUT	[4.75 TO 5.25 V]
T# 6	5.026 V VOUT	[4.75 TO 5.25 V]
T# 7	5.017 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-15.27 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.26 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	3.62 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.14 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	72.01 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 12 TESTING	\$78L05 @ 25C	08/13/18 08:11:22
T# 1	5.018 V VOUT	[4.8 TO 5.2 V]
T# 2	5.018 V VOUT	[4.75 TO 5.25 V]
T# 3	5.013 V VOUT	[4.75 TO 5.25 V]
T# 4	5.033 V VOUT	[4.75 TO 5.25 V]
T# 5	5.029 V VOUT	[4.75 TO 5.25 V]
T# 6	5.024 V VOUT	[4.75 TO 5.25 V]
T# 7	5.014 V VOUT	[4.75 TO 5.25 V]
T# 8	2.672 MA BIAS CURRENT	[-6 TO 6 MA]
T# 9	-14.47 MV LINE REGULATION	[-150 TO 150 MV]
T# 10	-13.66 MV LINE REGULATION	[-100 TO 100 MV]
T# 11	3.22 MV LOAD REGULATION	[-60 TO 60 MV]
T# 12	5.22 MV LOAD REGULATION	[-30 TO 30 MV]
T# 13	69.17 DB RIPPLE REJECTION	[41 TO 500 DB]
T# 14	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 15	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Post Burn-In Test Results at +125°C



JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 1 TESTING	\$78L05 @ 125C	08/13/18 08:32:58
T# 1	5.047 V VOUT	[4.75 TO 5.25 V]
T# 2	5.039 V VOUT	[4.75 TO 5.25 V]
T# 3	5.064 V VOUT	[4.75 TO 5.25 V]
T# 4	5.057 V VOUT	[4.75 TO 5.25 V]
T# 5	5.054 V VOUT	[4.75 TO 5.25 V]
T# 6	5.040 V VOUT	[4.75 TO 5.25 V]
T# 7	2.558 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0111 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 2 TESTING	\$78L05 @ 125C	08/13/18 08:33:25
T# 1 5.028 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.021 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.046 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.040 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.035 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.023 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.558 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1050 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 3 TESTING	\$78L05 @ 125C	08/13/18 08:33:59
T# 1	5.045 V VOUT	[4.75 TO 5.25 V]
T# 2	5.037 V VOUT	[4.75 TO 5.25 V]
T# 3	5.062 V VOUT	[4.75 TO 5.25 V]
T# 4	5.056 V VOUT	[4.75 TO 5.25 V]
T# 5	5.051 V VOUT	[4.75 TO 5.25 V]
T# 6	5.039 V VOUT	[4.75 TO 5.25 V]
T# 7	2.558 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0700 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 4 TESTING	\$78L05 @ 125C	08/13/18 08:34:33
T# 1	5.046 V VOUT	[4.75 TO 5.25 V]
T# 2	5.039 V VOUT	[4.75 TO 5.25 V]
T# 3	5.064 V VOUT	[4.75 TO 5.25 V]
T# 4	5.057 V VOUT	[4.75 TO 5.25 V]
T# 5	5.053 V VOUT	[4.75 TO 5.25 V]
T# 6	5.040 V VOUT	[4.75 TO 5.25 V]
T# 7	2.558 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0056 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 5 TESTING	\$78L05 @ 125C	08/13/18 08:35:03
T# 1 5.041 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.034 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.058 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.052 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.047 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.036 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.435 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0875 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 0.0000 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]
PASS BIN 1		

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 6 TESTING	\$78L05 @ 125C	08/13/18 08:35:35
T# 1 5.042 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.034 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.059 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.053 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.049 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.036 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.558 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1050 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0111 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 7 TESTING	\$78L05 @ 125C	08/13/18 08:36:05
T# 1	5.046 V VOUT	[4.75 TO 5.25 V]
T# 2	5.039 V VOUT	[4.75 TO 5.25 V]
T# 3	5.063 V VOUT	[4.75 TO 5.25 V]
T# 4	5.058 V VOUT	[4.75 TO 5.25 V]
T# 5	5.054 V VOUT	[4.75 TO 5.25 V]
T# 6	5.041 V VOUT	[4.75 TO 5.25 V]
T# 7	2.558 MA BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8	-.0875 MA I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9	.0167 MA I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 8 TESTING	\$78L05 @ 125C	08/13/18 08:36:36
T# 1 5.042 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.035 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.060 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.053 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.049 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.037 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.435 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0875 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 0.0000 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]
PASS BIN 1		

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 9 TESTING	\$78L05 @ 125C	08/13/18 08:37:08
T# 1 5.044 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.036 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.061 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.054 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.050 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.038 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.558 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1050 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 10 TESTING	\$78L05 @ 125C	08/13/18 08:37:48
T# 1 5.045 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.037 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.063 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.056 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.052 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.039 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.558 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.1050 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 11 TESTING	\$78L05 @ 125C	08/13/18 08:38:28
T# 1 5.048 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.040 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.065 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.059 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.055 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.042 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.558 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0875 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1

JOB NUMBER: DDS-101-21-A TEST POINT: POST BURN-IN ELECTRICAL SEQ.#: 14

DEVICE 12 TESTING	\$78L05 @ 125C	08/13/18 08:39:12
T# 1 5.044 V	VOUT	[4.75 TO 5.25 V]
T# 2 5.036 V	VOUT	[4.75 TO 5.25 V]
T# 3 5.061 V	VOUT	[4.75 TO 5.25 V]
T# 4 5.054 V	VOUT	[4.75 TO 5.25 V]
T# 5 5.050 V	VOUT	[4.75 TO 5.25 V]
T# 6 5.037 V	VOUT	[4.75 TO 5.25 V]
T# 7 2.435 MA	BIAS CURRENT	[-5.5 TO 5.5 MA]
T# 8 -.0875 MA	I BIAS CHANGE (VS)	[-1.5 TO 1.5 MA]
T# 9 .0056 MA	I BIAS CHANGE (LOAD)	[-0.1 TO 0.1 MA]

PASS BIN 1



MIL-PRF-38534 CLASS K DATAPACK

Scanning Electron Microscopy (SEM) analysis



TANDEX TEST LABS, INC.

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SCANNING ELECTRON MICROSCOPE ANALYSIS

DIE DEVICES

TTL Job # DDS-101-21-W

Date: July 11, 2018

Part Number: 78L05

Part Type: Voltage Regulator

Lot: Lot# 8571 D/C: 1810 WFR# 21


Quantity: Eight (8)

Purchase Order: SS139

Submitted by: _____


Jason A. Salinas
DPA/MTS

Approved by: _____


Deborah M. Gorham
Quality Assurance

TANDEX TEST LABS TTL Job # DDS-101-21-W

Summary

Eight (8) Voltage Regulator P/N: 78L05 were submitted by Die Devices for Scanning Electron Microscopy Analysis. This Analysis was performed in accordance with Mil-Std-883, Method 2018.6 The devices were assigned sample number 1 through 8 by Tandex Test Labs.

1. **Plasma Etching** Carbon Tetraflouride Gas 92% and 8% Oxygen was used to remove the glassivation. This etching is destructive and uneven in the rates of glass removal in various areas of the die.
2. **SEM Inspection** was performed on all eight devices. All eight devices revealed adequate metallization coverage and met the requirements of MIL-STD-883, Method 2018.6. See DPA form on page 3 and figures 1 through 3, for typical photographs.

Conclusion: This lot is acceptable for use.

TANDEX TEST LABS TTL Job # DDS-101-21-W
SEM EXAMINATION

TTL Job No. DDS-101-21-W	Part Number 78L05	Part Type Voltage Regulator	Date July 10, 2018
Lot Date Code: WFR# 21 Lot# 8571 D/C: 1810	Sample Qty. 8	Serial Numbers 1 - 8	Test Specifications Mil-Std-883 Method 2018.6
Misc. ID No.	Qty. Accept 8	Qty. Reject 0	Qty. Suspect 0

Notes:

S/N	Investigation Findings / Comments	A/R/S
1	No Anomalies	A
2	No Anomalies	A
3	No Anomalies	A
4	No Anomalies	A
5	No Anomalies	A
6	No Anomalies	A
7	No Anomalies	A
8	No Anomalies	A

Each sample was inspected for the general metallization condition at a magnification between 1,000 X and 6,000 X over 25% of the total metallization (unless specified differently). Each sample was inspected from four (4) viewing directions at a magnification between 5,000 X and 20,000 X

Inspection required Yes: X No: Devices constructed with expanded Metallization Yes: X No:

Sample Glassivated Yes: X No: Dual Level Metallization Yes: No: X

Glassivation Removed Using: PLASMA ETCHING

Beam accelerating voltage 10kV to 20kV Viewing angle 45 deg



Technician Stamp:

TANDEX TEST LABS TTL Job # DDS-101-21-W

Photodocumentation

TANDEX TEST LABS TTL Job # DDS-101-21-W

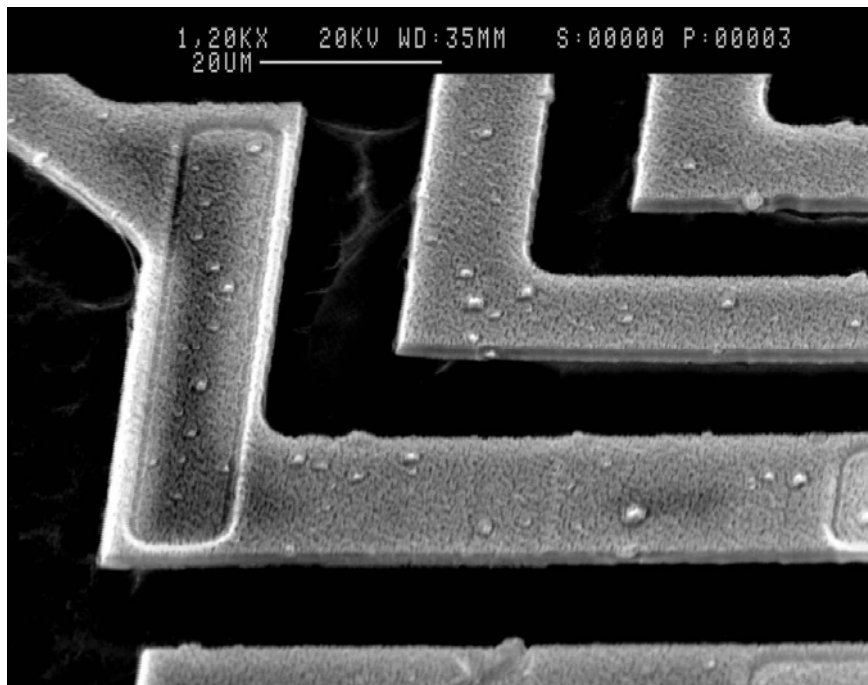


Fig: 1

Mag: 1,200X

S/N: 4

Description: SEM photograph of general metallization.

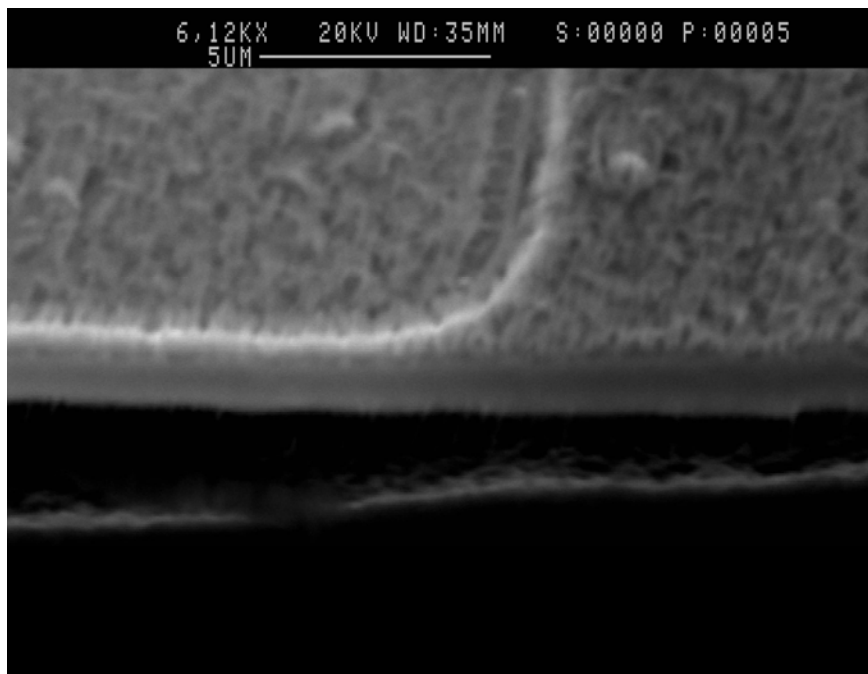


Fig: 2

Mag: 6,120X

S/N: 4

Description: SEM photograph of metallization typical step.

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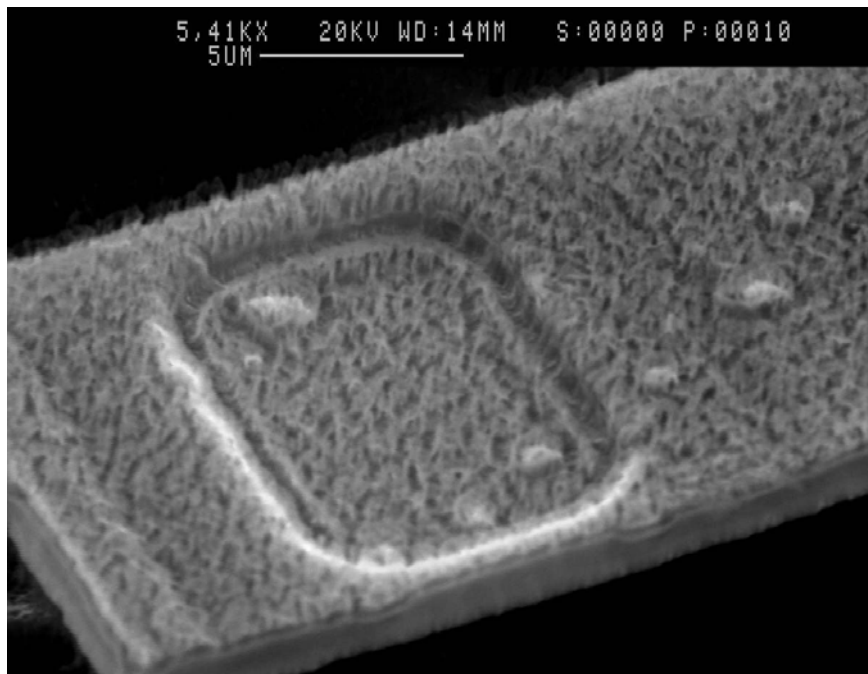


Fig: 3

Mag: 5,410X

S/N: 4

Description: SEM photograph of typical contact window device.

TANDEX TEST LABS, INC.

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Certificate of Conformance

CUSTOMER:	Silicon Supplies Limited 47 Wherry Road Norwich, NR1, 1WS United Kingdom Vat GB# 114 3513 56	DATE: July 11, 2018
TEST REPORT:	DDS-101-21-W	QUANTITY REQUIRED: 8
P.O. NUMBER:	SS139	QUANTITY PROCESSED: 8
DESCRIPTION:	Voltage Regulator	QUANTITY PASSED: 8
PART NUMBER(S):	78L05	QUANTITY FAILED: 0
MFG PART NUMBER	78L05	QUANTITY SHIPPING: 8
LOT / DATE CODE:	LOT# 8571 WFR# 21 D/C: 1810	
MFG:	SILICON SUPPLIES	

METHOD OF TESTING: MIL-STD-883 METHOD 2018.6

I hereby certify that the subject components have been processed and inspected in accordance with instructions with specifications referenced in your purchase order. Physical records and/or data pertinent to applicable military, proprietary, and/or commercial specifications are on file and available upon request for inspection at this facility.





Deborah M. Gorham
QUALITY ASSURANCE