Project Number:	Tracking Code: TC0850--2118_ReportRev3		
Requested by: Mark Shireman	Date: 1/16/2009	Product Rev: Y and AD	
Part #: SEAM-30-03.5-L-06-2-A / SEAF-30-06.0-L-06-2-A & SEAM-30-03.5-L-06-1-A / SEAF-30-06.0-L-06-1-A	Lot #: 2433137 - 1,2,3,4	Tech: Troy Cook	Eng: Troy Cook
Part description: SEAX			Qty to test: 32
Test Start: 12/10/2008	Test Completed: 12/18/2008		

PULL / SHEAR TESTING DVT REPORT

PART DESCRIPTION

SEAM-30-03.5-L-06-2-A / SEAF-30-06.0-L-06-2-A (LEAD FREE)
&
SEAM-30-03.5-L-06-1-A / SEAF-30-06.0-L-06-1-A (LEAD)

CERTIFICATION

All instruments and measuring equipment were calibrated to National Institute for Standards and Technology (NIST) traceable standards according to IS0 10012-l and ANSI/NCSL 2540-1, as applicable.

SCOPE

To perform the following tests: Pull / Shear testing

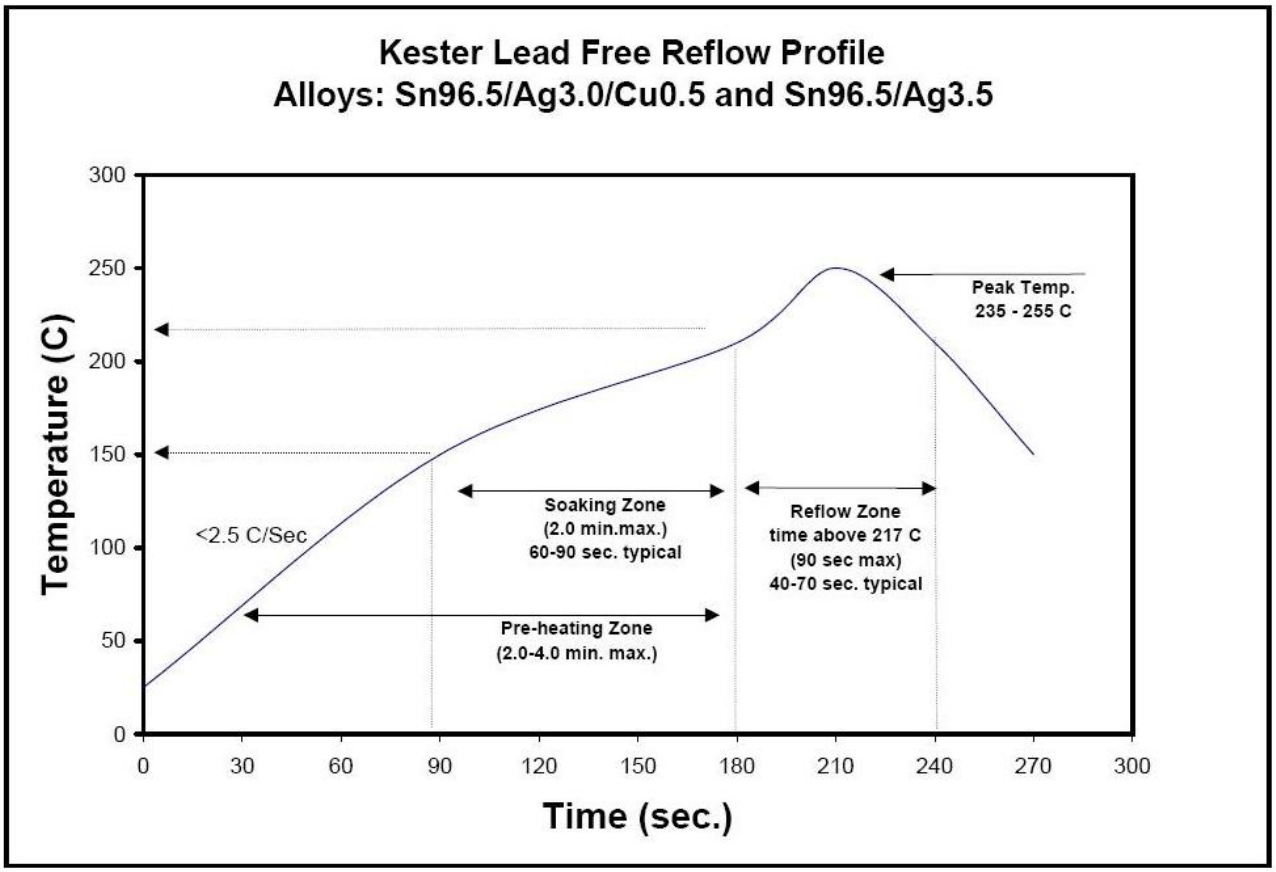
APPLICABLE DOCUMENTS

Standards: EIA Publication 364

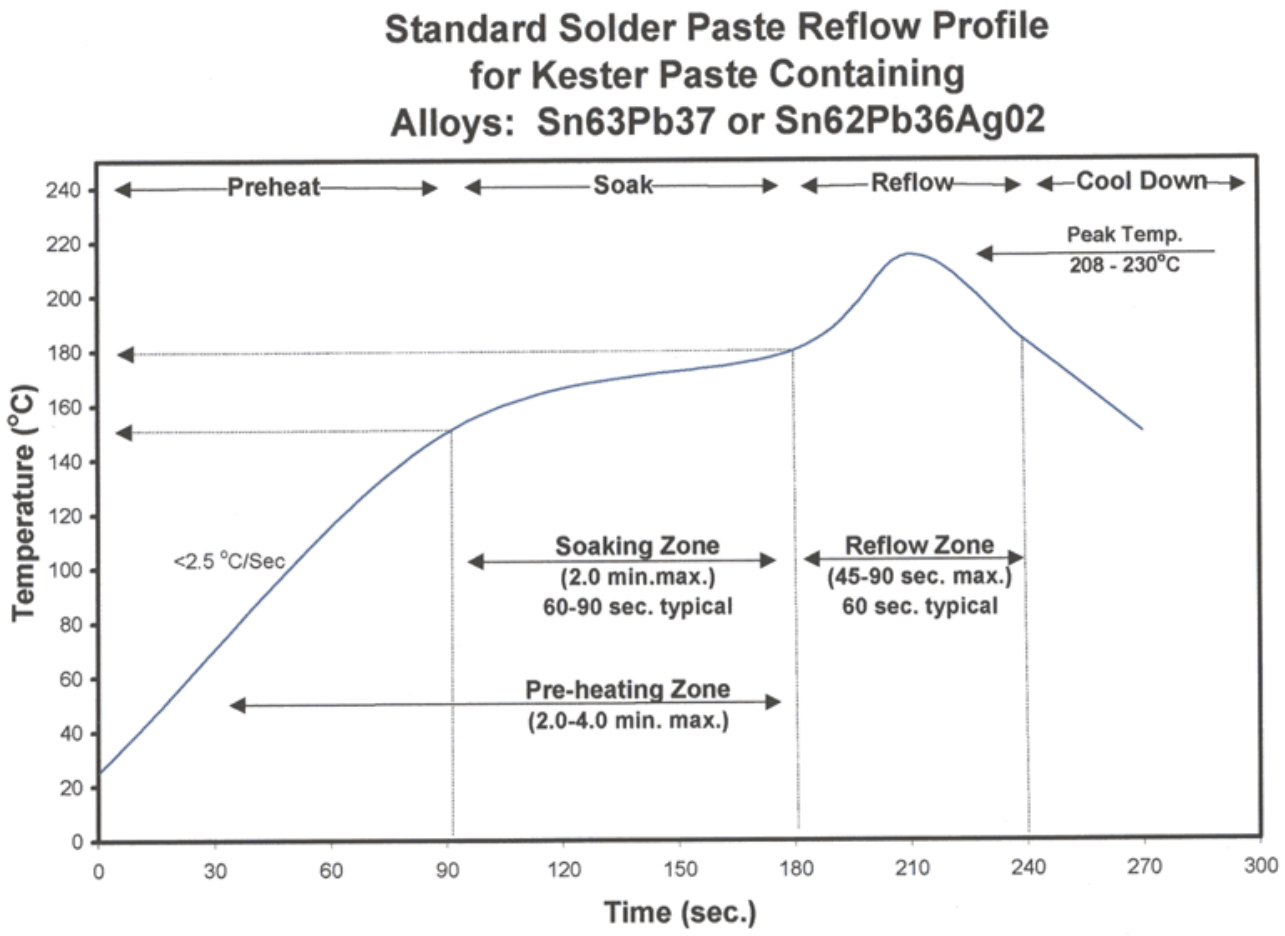
TEST SAMPLES AND PREPARATION

1) All materials were manufactured in accordance with the applicable product specification.
2) All test samples were identified and encoded to maintain traceability throughout the test sequences.
3) After soldering, the parts to be used for LLCR and DWV/IR testing were cleaned according to TLWI-0001.
4) Either an automated cleaning procedure or an ultrasonic cleaning procedure may be used.
5) The automated procedure is used with aqueous compatible soldering materials.
6) Parts not intended for testing LLCR and DWV/IR are visually inspected and cleaned if necessary.
7) Any additional preparation will be noted in the individual test sequences.
8) Solder Information: Lead & Lead Free
9) Re-Flow Time/Temp: See accompanying profile.
10) Samtec Test PCBs used: PCB-100543-TST-XX

TYPICAL OVEN PROFILE (LEAD FREE)



TYPICAL OVEN PROFILE (LEAD)



ATTRIBUTE DEFINITIONS

The following is a brief, simplified description of attributes.

CONNECTOR PULL:

1) Secure connector with vise and pull on connector
    a. At 0°, in-line with connector

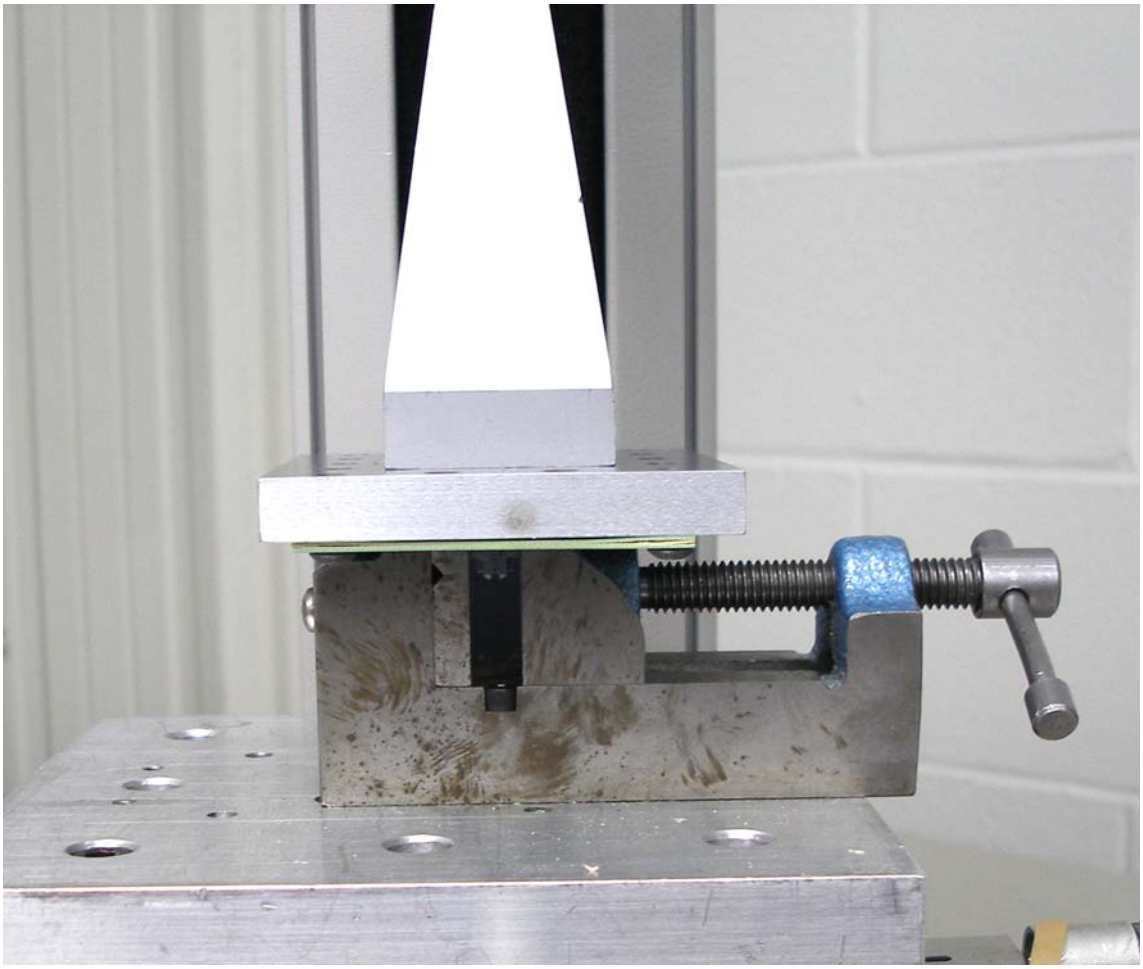


Fig. 1
(Typical set-up, actual part depicted.)

CONNECTOR SHEAR:

2) Secure connector to head and push against vise
    a. At 90°, perpendicular to connector

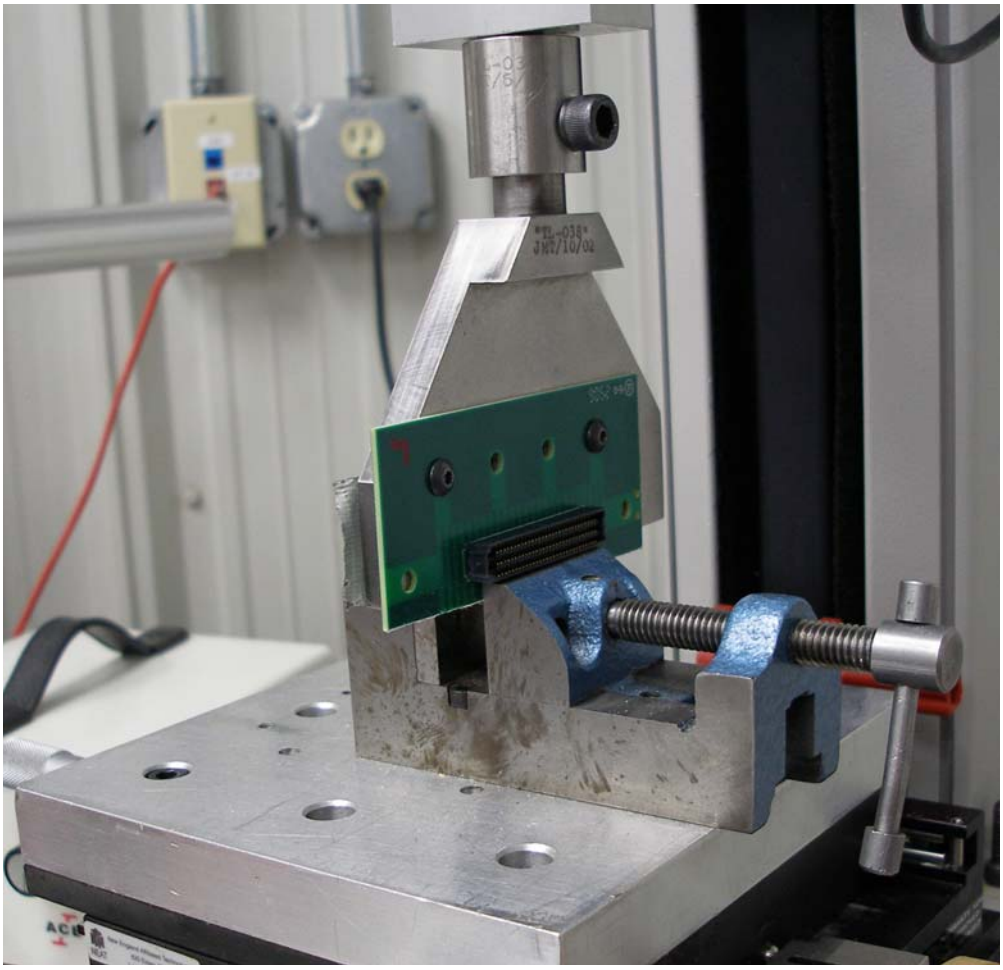


Fig. 2
(Typical set-up, actual part depicted.)

RESULTS

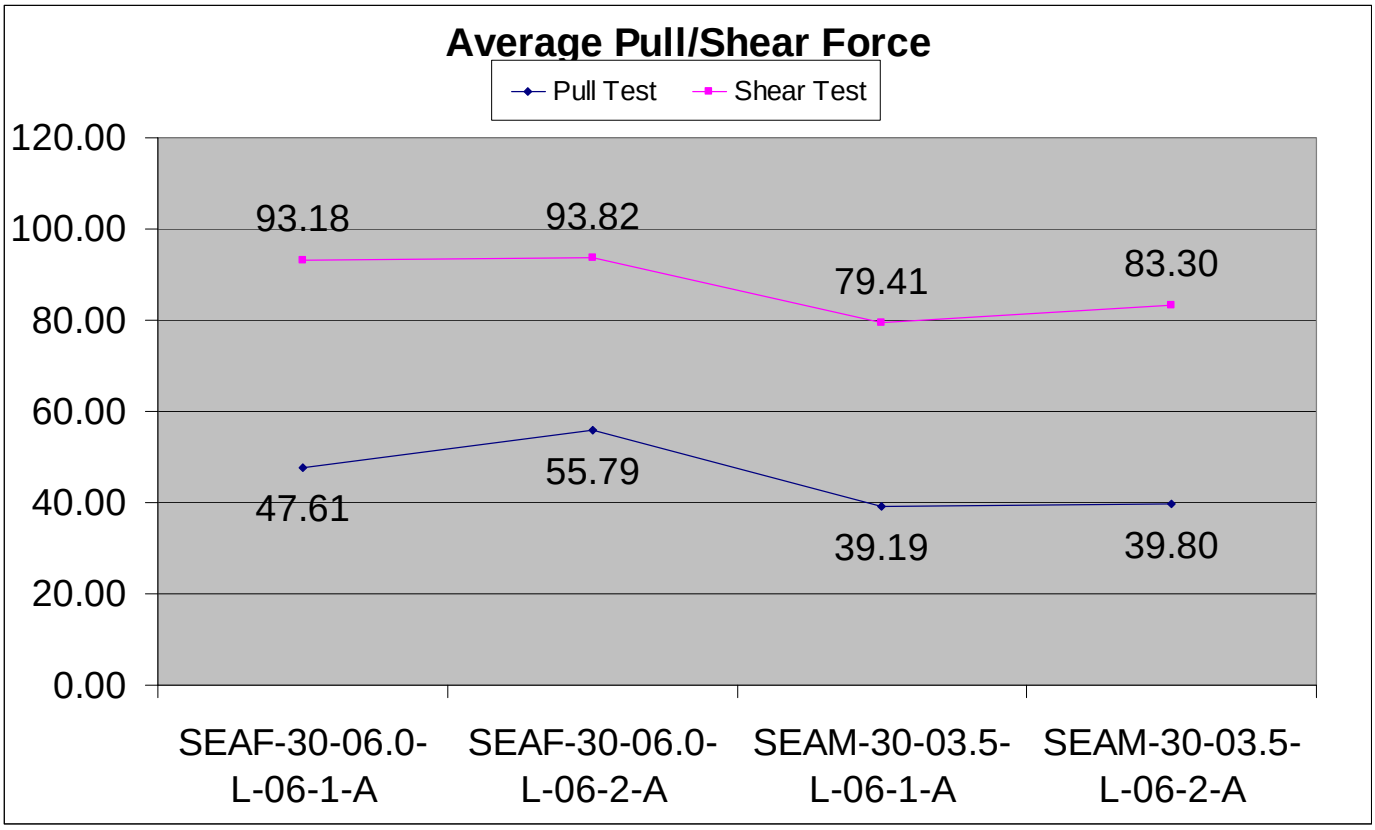
Connector Pull

- **SEAF**
  - **Lead**
    - **Min ---------- 47.61 lbs**
    - **Max---------- 60.92 lbs**
  - **Lead Free**
    - **Min ---------- 55.79 lbs**
    - **Max---------- 64.95 lbs**
- **SEAM**
  - **Lead**
    - **Min ---------- 39.19 lbs**
    - **Max---------- 53.10 lbs**
  - **Lead Free**
    - **Min ---------- 39.80 lbs**
    - **Max---------- 67.88 lbs**

Connector Shear

- **SEAF**
  - **Lead**
    - **Min ---------- 93.18 lbs**
    - **Max---------- 136.51 lbs**
  - **Lead Free**
    - **Min ---------- 93.82 lbs**
    - **Max---------- 137.43 lbs**
- **SEAM**
  - **Lead**
    - **Min ---------- 79.41 lbs**
    - **Max---------- 122.55 lbs**
  - **Lead Free**
    - **Min ---------- 83.30 lbs**
    - **Max---------- 144.85 lbs**

DATA SUMMARIES



DATA

PULL TEST

SEAF				SEAM			
LEAD		LEAD FREE		LEAD		LEAD FREE	
Sample #	Force (lbs)	Sample #	Force (lbs)	Sample #	Force (lbs)	Sample #	Force (lbs)
1	49.81	1	57.01	1	53.10	1	67.88
2	47.61	2	55.79	2	46.02	2	59.33
3	60.92	3	61.24	3	52.01	3	46.88
4	53.35	4	63.97	4	39.19	4	63.24
5	57.99	5	60.79	5	45.90	5	57.01
6	57.01	6	56.16	6	42.73	6	39.80
7	55.30	7	64.95	7	48.83	7	50.30
8	50.91	8	**n/a**	8	41.39	8	57.50

SHEAR TEST

SEAF				SEAM			
LEAD		LEAD FREE		LEAD		LEAD FREE	
Sample #	Force (lbs)	Sample #	Force (lbs)	Sample #	Force (lbs)	Sample #	Force (lbs)
1	110.70	1	94.24	1	114.96	1	125.15
2	108.70	2	129.98	2	116.65	2	116.16
3	99.90	3	102.19	3	84.43	3	83.30
4	136.51	4	137.43	4	89.65	4	143.97
5	125.19	5	124.00	5	79.41	5	90.01
6	93.18	6	117.05	6	114.20	6	131.54
7	93.91	7	93.82	7	122.55	7	144.85
8	114.85	8	118.32	8	81.53	8	122.55

EQUIPMENT AND CALIBRATION SCHEDULES

Equipment #: LC-2500N(icell)-1
Description: 2500 N Load Cell for Dill Quantrol
Manufacturer: Dillon Quantrol
Model: icell
Serial #: 01-0132-01
Accuracy: .10% of capacity
… Last Cal: 08/07/2008, Next Cal: 08/07/2009

Equipment #: TCT-04
Description: Dillon Quantrol TC21 25-1000 mm/min series test stand
Manufacturer: Dillon Quantrol
Model: TC2 I series test stand
Serial #: 04-1041-04
Accuracy: Speed Accuracy: +/- 5% of indicated speed
… Last Cal: 05/18/2008, Next Cal: 05/18/2009