



INDUSTRIAL TRI-STAR

AS9102 Rev. B First Article Inspection
 Form 1: Part Number Accountability

1. Part Number 0460-202-1631 (REF. P/N: D19-1616-089)	2. Part Name PIN CONTACT SIZE 16	3. Serial Number N/A	4. FAIR Number TRI-17-623691
5. Part Revision Level J	6. Drawing Number 0460-202-16**	7. Drawing Revision Level J	8. Additional Changes N/A
9. Manufacturing Process Reference TRI-17-623691	10. Organization Name CARLISLE IT/ TRI-STAR ELECTRONICS	11. Supplier Code TRI-STAR	12. P.O. Number -
13. Detail Part: <input checked="" type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/>	Partial FAI: <input type="checkbox"/>	
Assembly FAI: <input type="checkbox"/>	<i>Baseline Part Number (including revision level):</i> <i>Reason for Partial FAI:</i>		

a) If above part number is a detail part only, go to Field 19.
 b) If above part number is an assembly, go to the "INDEX" section below.

INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.

15. Part Number	16. Part Name	17. Part Serial Number	18. FAIR Number
19. Signature:	<input checked="" type="checkbox"/> FAI complete <input type="checkbox"/> FAI not complete		20. Date: 07/26/2019
21. Reviewed By:	<input checked="" type="checkbox"/> TSE-121 A JCS	<input type="checkbox"/> TSE-110 A HB	22. Date: 07/26/2019
23. Customer Approval:	24. Date:		

AS9102 Rev. B First Article Inspection
Form 2: Product Accountability – Materials, Special Processes and Functional Testing

1. Part Number 0460-202-1631 (REF. P/N: D19-1616-089)	2. Part Name PIN CONTACT SIZE 16	3. Serial Number N/A	4. FAIR Number TRI-17-623691
5. Material or Process Name	6. Specification Number	7. Code	8. Supplier
CONTACT BODY LEADED COPPER	PER ASTM B 301		BAOSHIDA
FINISH GOLD	MIL-DTL-45204 TYPE II, GRADE C		TSEI EL SEGUNDO
NICKEL	PER AMS-QQ-N-290		TSEI EL SEGUNDO
ZONE ANNEAL	PER DPS 2-026-26		TSEI EL SEGUNDO
11. Functional Test Procedure Number	12. Acceptance report number		
13. Comments:			
14. Signature		15. Date	07/26/2019

1. Part Number 0460-202-1631 (REF. P/N: D19-1616-089)				2. Part Name PIN CONTACT SIZE 16			3. Serial Number N/A	4. FAIR Number TRI-17-623691
Characteristic Accountability				Inspection / Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed/ Qualified Tooling	11. Non-Conformance Number	14. Additional Data / Comments ALL DIMENSION SHOWN ARE IN INCHES, AFTER PLATING.	
1	C6	N/A	Ø .17 / .032 FLAT	Ø .023	COMPARATOR	N/A		
2	D6	N/A	.020 ± .002	.021	COMPARATOR	N/A		
3	C5	N/A	5° MAX BLEND ANGLE	5°	COMPARATOR	N/A		
4	C5	N/A	25 √	6.9 √	SURFACE ROUGHNESS TESTER	N/A	SEE ATTACHED READING	
5	D5	N/A	.5600 +.0030 -.0026	.5600	COMPARATOR	N/A		
6	D6	N/A	.810	.811	COMPARATOR	N/A		
7	D2	N/A	.250 +.005/ -.004	.251	COMPARATOR	N/A		
8	D2	N/A	.268 ± .016	.266	COMPARATOR	N/A		
9	D3	N/A	.030	.027	COMPARATOR	N/A		
10	D4	N/A	.0445 ± .0010	.0450	COMPARATOR	N/A		
11	D4	N/A	.127 ± .002	.127	COMPARATOR	N/A		
12	C4	N/A	45° ± 2°	45°	COMPARATOR	N/A		
13	C4	N/A	R. 050 BLEND	R .050	COMPARATOR	N/A		
14	C1	N/A	Ø .086 ± .003	Ø .088	COMPARATOR	N/A		
15	C1	N/A	Ø .1010 + .0010 - .0006	Ø .1011	COMPARATOR	N/A		
16	C1	N/A	90° ± 4°	88°	COMPARATOR	N/A		
12. Signature:							13. Date: 7/26/2019	

1. Part Number 0460-202-1631 (REF. P/N: D19-1616-089)				2. Part Name PIN CONTACT SIZE 16			3. Serial Number N/A	4. FAIR Number TRI-17-623691
Characteristic Accountability				Inspection / Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed/Qualified Tooling	11. Non-Conformance Number	14. Additional Data / Comments ALL DIMENSION SHOWN ARE IN INCHES, AFTER PLATING.	
17	C1	N/A	Ø .0680 + .0006 - .0010	Ø .0675	COMPARATOR	N/A		
18	C2	N/A	Ø .040 + .002 - .004	Ø .037	COMPARATOR	N/A		
19	B2	N/A	R. 003 MAX	R. .001	COMPARATOR	N/A		
20	B2	N/A	R. 002 +.002 - .001 BREAK CORNERS 2X	R. .001	COMPARATOR	N/A		
21	C3	N/A	Ø .1300 + .0020 - .0060	Ø .1306	COMPARATOR	N/A		
22	C4	N/A	R. 003 ± .002	R. .004	COMPARATOR	N/A		
23	C6	N/A	RADIUS (.025) TANGENT TO BLEND ANGLE	R. .030	COMPARATOR	N/A		
24	C7	N/A	Ø .1010 + .0020 - .0006	Ø .1015	COMPARATOR	N/A		
25	D7	N/A	Ø .0615 +.0010 -.0006	Ø .0621	COMPARATOR	N/A		
26	A7	N/A	NOTE 1	CONFORMED	N/A	N/A		
27	A7	N/A	NOTE 2	CONFORMED	COMPARATOR	N/A	WITHIN .004 CONCENTRIC	
28	A7	N/A	NOTE 3	CONFORMED	SURFACE ROUGHNESS TESTER	N/A		
29	A7	N/A	NOTE 4	CONFORMED	N/A	N/A	CONFORMED DURING ZONE ANNEAL PROCESS	
30	A7	N/A	NOTE 5	CONFORMED	N/A	N/A	CONFORMED DURING ZONE ANNEAL PROCESS	
12. Signature:							13. Date: 7/26/2019	



1. Part Number 0460-202-1631 (REF. P/N: D19-1616-089)				2. Part Name PIN CONTACT SIZE 16			3. Serial Number N/A	4. FAIR Number TRI-17-623691
Characteristic Accountability				Inspection / Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed/Qualified Tooling	11. Non-Conformance Number	14. Additional Data / Comments ALL DIMENSION SHOWN ARE IN INCHES, AFTER PLATING.	
31	A7	N/A	NOTE 6	CONFORMED	N/A	N/A	CONFORMED DURING PLATING PROCESS	
32	B7	N/A	NOTE 7	CONFORMED	N/A	N/A	CERTIFICATE OF CONFORMANCE FROM RAW MATERIAL SUPPLIER (CT-17-266222)	
12. Signature:							13. Date: 7/26/2019	

BAOSHIDA SWISSMETAL

Delivery note 80216880
Date 12/20/2016

Ship-to address
Tri-star Riverside
4200 Garner Road
RIVERSIDE CA 92501
USA

Sold-to Party
Carisle Interconnect Technologies
2201 Rosecrans Ave.
EL SEGUNDO CA 90245
USA

Customer no. 8526
Your Reference Sorenson Cathy
PO-595634 of 09/29/2016
Sales administration Anne Ruinelli
Sales manager Thomas Chloicne
Order 156996, of 10/18/2016

DOCK TO STOCK
Signature: *Frankoff*
Date: 3-2-17

CF-17-264222

Pos.	Material Description	Your No.	Quantity
10	2-9048-PPCA-1 Alloy: C99 CUPB1P, EN CW113C Wire Round made of High copper alloys 2.522 mm (0.0000 mm/-0.0050 mm) RM: 352 N/mm2 - 393 N/mm2 Elongation ASTM: min. 3% Elec. cond. min. 85 %IACS 18 kg Coils: 25 kg EN-Standard-Chemistry CW113C ASTM-Standard-Chemistry C18700 Certificate: EN 10204 3.1 Gross: 2,145.000 KG Net: 1,977.000 KG Handling Unit Number 1000562479, 1000562480, 1000562481, 1000562482, 1000562483, 1000562484, 1000562485, Customs tariff number: 74081991 The declaration of conformity for the material contained in this position is printed at the end of this document.	671.308 CBS	4,358.542 LB

Terms of delivery DDP Riverside
Shipping conditions by ship
Carrier: Fiège Logistik (Schweiz) AG, Genusstrasse 11
CH-4142 Münchenstein

Declaration of conformity type D to EN 1655: 1997

(confirms also with a certificate of compliance with the order to the old norm DIN 50049 - 2.1)

BAOSHIDA SWISSMETAL

Tri-star Riverside
4200 Garner Road
RIVERSIDE CA 92501
ETATS-UNIS

Certif-ID creation date: 2016/12/20
10212354 - 40000193931
Your customer no.
8526
Your order no. / date
PO-595634 / 20160929
Our delivery no. / date
80216880 000010 / 20161221
Our order no. / date
0000156996 000010 / 20161018
Production order / inspection lot / inspection lot creation date
10212354 / 40000193931 / 2016/11/24

Weight: 4358.542 LB
Material: 2-9048-PPCA-1 / C99 FTL RON Ø2.522
Product: CW113C - C18700 -
Dim 1: 2.522 mm -0.005
Alloy: CUPB1P
Weight of ring min.: 18 kg
Weight of ring max.: 25 kg

Characteristic	Baoshida Swissmetal		Norm	Results	Unit
	Min	Max			

Mechanical / physical and other properties
Tensile Strength 352 393 N/mm2

Yield strength Rp 0,2 % 335 334 338 332 330 332 N/mm2

Elongation ASTM 3.0 %

This product has been manufactured under our quality-environment-management-system to ISO 9001 / 14001, BVC SCEsm 003.

Baoshida Swissmetal Ltd,
Route de Tavannes 4, CH-2732 Reconvilier

CF-17-266222



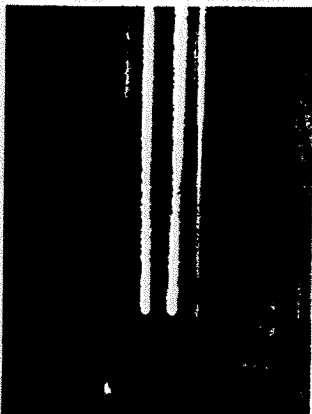
INTERCONNECT TECHNOLOGIES



TRI-STAR
Electronics International, Inc.

Tri-Star Electronics International
2201 Rosecrans Ave., El Segundo, CA 90245
www.carlisleit.com
Ph: (310) 536-0444

3-23-17



TRI-17-623691
D19-1616-089
QTY 10007

Fischerscope® XRAY XDLM 237
Product: D19-1616-089
Lot Number: TRI-17-623691
Application: Au/Ni/PbCu

Machine ID: #0628 Date: 3/22/2017
Time: 6:16:19 AM Operator: 2297

n=	1	Au 1 =	12.4 µ"	Ni 2 =	158 µ"
n=	2	Au 1 =	12.6 µ"	Ni 2 =	142 µ"
n=	3	Au 1 =	12.1 µ"	Ni 2 =	141 µ"
n=	4	Au 1 =	13.1 µ"	Ni 2 =	141 µ"
n=	5	Au 1 =	11.5 µ"	Ni 2 =	138 µ"
n=	6	Au 1 =	11.7 µ"	Ni 2 =	137 µ"
n=	7	Au 1 =	14.3 µ"	Ni 2 =	144 µ"
n=	8	Au 1 =	11.6 µ"	Ni 2 =	144 µ"
n=	9	Au 1 =	12.5 µ"	Ni 2 =	132 µ"
n=	10	Au 1 =	11.8 µ"	Ni 2 =	146 µ"
n=	11	Au 1 =	12.7 µ"	Ni 2 =	144 µ"
n=	12	Au 1 =	13.1 µ"	Ni 2 =	144 µ"
n=	13	Au 1 =	12.5 µ"	Ni 2 =	148 µ"
n=	14	Au 1 =	12.0 µ"	Ni 2 =	145 µ"
n=	15	Au 1 =	14.1 µ"	Ni 2 =	145 µ"
n=	16	Au 1 =	12.9 µ"	Ni 2 =	138 µ"
n=	17	Au 1 =	12.8 µ"	Ni 2 =	148 µ"
n=	18	Au 1 =	13.0 µ"	Ni 2 =	140 µ"
n=	19	Au 1 =	12.8 µ"	Ni 2 =	143 µ"
n=	20	Au 1 =	12.2 µ"	Ni 2 =	165 µ"

Au 1 µ" Ni 2 µ"

Mean 12.6
Standard Deviation 0.73
COV (%) 5.79
Minimum 11.5
Maximum 14.3
Range 2.7
Number of readings 20
Measuring time 10 sec
Collimator size 2 = 0.20 Dm.
Measurement Mode X-Ray Fluorescence

Density (Au 1) 17.5 g/cm³
Calibration Standards Types Foil Standards

See Drawing for Point of Measurement

ROUGHNESS SURFACE RESULTS

Ra 6.9 μ in.

Mitutoyo
DATE 03-23-2002 03:50:25
TIME
STAND
PROFILE
FILTER
EVA-L
N
 λ_c
 λ_s
TILT-COMP. ALL

Subtest S-J-400
CURVE-CMP OFF
M-SPEED 0.004in/s
R-SPEED 0.04in/s
AUTO-RTN ON
RANGE
ANALYZER ANS11995
DRIVE
STYLUS
PRE/POST
R
GAUSS 0.16in
5
100 μ in
0.03in

OFF
0.004in/s
EVA-L
 λ_c
ON
32000 μ in
 \pm ESC
Ra
Rmax
Rz
STAND ON
ON

R-PROFILE
0.16in
0.03inX5
6.9 μ in
51 μ in
45 μ in

R-PROFILE
EVA-L
 $\lambda_c=0.03inX5$
x20K
x50
0.16in

Ver. 50.000 μ in/in
Hor. 0.020in/in

7

6

5

4

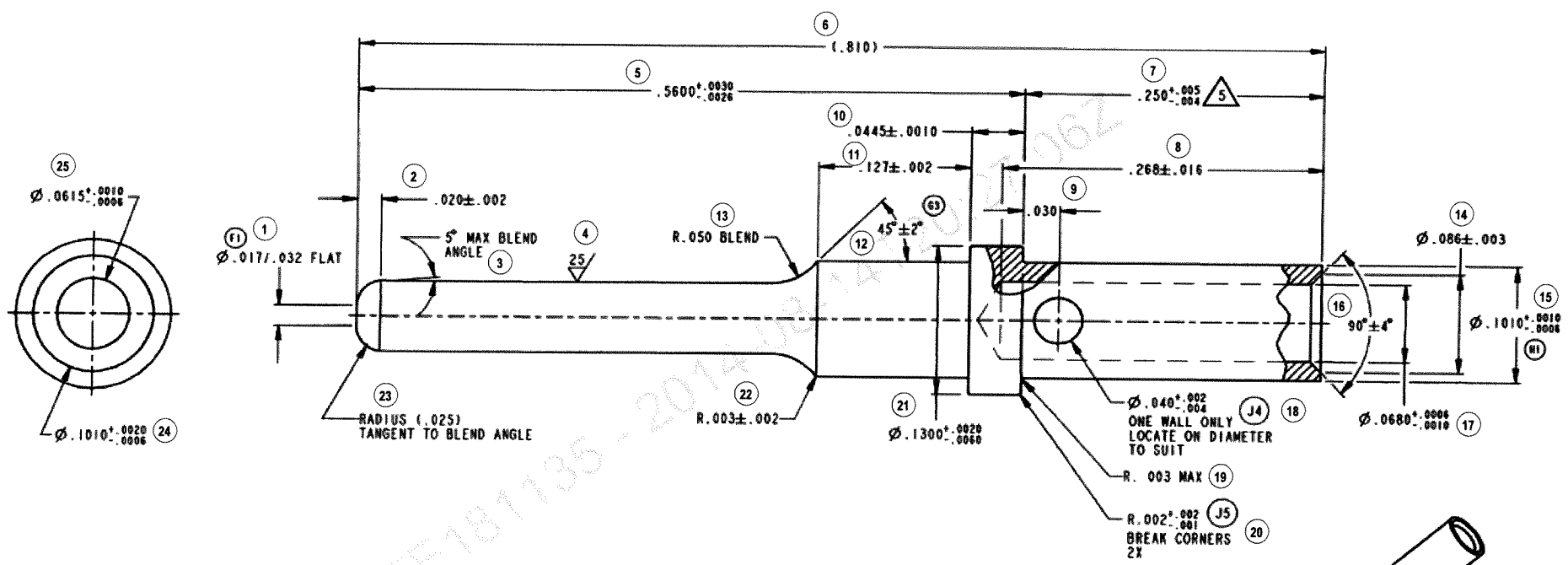
3

2

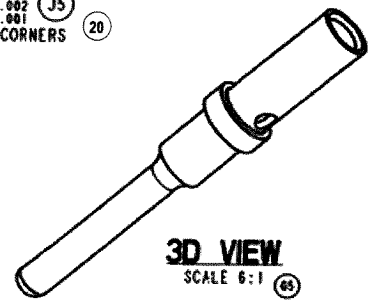
1

REV J 0460-202-16**

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
F	REVISED & REDRAWN PER E.O. P15110	8-9-96	R.D.R.
G	REVISED & REDRAWN PER E.O. P15623	2-15-99	R.D.R.
H	REVISED PER E.O. P16471	1-27-00	R.D.R.
J	REVISED PER E.O. P18834	2-21-05	RDR



APPROVED
By David Meyer at 1:53 pm, Aug 14, 2014



- 32 7. Cold Headed Material: DMS 2-D10-35 C1915
Machined Material: DIMS 2-D10-01 C97
- 31 6. NICKEL PLATING ONLY: AFTER PLATING, COAT THE CONTACT WITH CONTACT LUBRICANT PER DIPS 1-026-05.
- 30 5 ZONE ANNEAL CRIMP BARREL PER DPS 2-016-26 REV AT. VERIFY CRIMPABILITY USING HDT-50-00 CRIMP TOOL.
- 29 4. ALL DIMENSIONS SHOWN ARE BEFORE PLATING. FOR INSPECTION AFTER PLATING REFER TO APPLICABLE DIPS.
- 28 3. ALL SURFACES $\nabla 6.3$ FINISH OR BETTER EXCEPT AS NOTED.
- 27 2. ALL DIAMETERS TO BE CONCENTRIC WITH EACH OTHER WITHIN .004.
- 26 1. REMOVE ALL LOOSE CHIPS & BURRS. CAUTION: DO NOT HONITE.

Part Number	Plating per DIPS 12-XXX	Plating Type	Lubrication
0460-202-1801	DIPS 12-01	Unplated	NA
0460-202-1831	DIPS 12-31	Gold	NA
0460-202-18141	DIPS12-141	Nickel	See Note 6

TOLERANCES UNLESS OTHERWISE SPECIFIED		SIGNATURE & DATE	
DECIMALS: .0150, .005	FRACTIONS: 1/16, 1/32, 1/64	DR	J. APOSTOL 11FEB2009
ANGLES: 1/16, 1/32, 1/64	UNLESS OTHERWISE SPECIFIED	CHK	R. Meyer 2/15/09
ALL DIMENSIONS TO BE TAKEN TO THE FACE OF BURR AND SHARP EDGES		FE	D. Meyer 2/15/09
MATERIAL	See note 7	APPD	R. Reed 2/22/05
FINISH	** = DIPS 12 - ***	SCALE	15:1 WT

PIN CONTACT
SIZE 16
16, 18 & 20 AWG WIRE
HD SERIES

CP

The Deutch Company
DEUTSCH I.P.D.
3850 INDUSTRIAL AVE.
HEMET, CALIF. 92545

C 0460-202-16**

DATE CODE SHEET 1 OF 1

NOTES: UNLESS OTHERWISE SPECIFIED (F2) (F3) (F4) (F5) (G1) (G2) (J1)

7

6

5

4

3

2

A

E

D

C

B

E

D

C

B