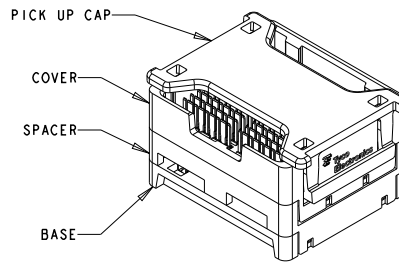
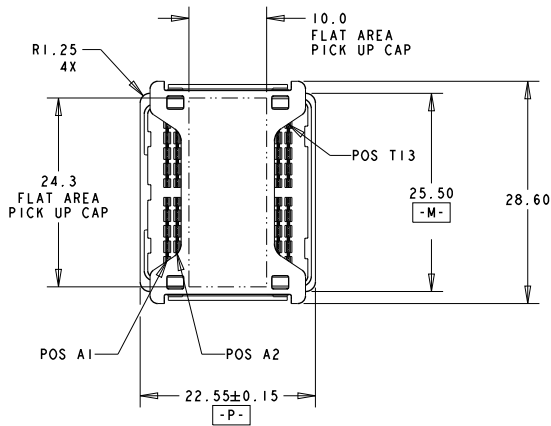
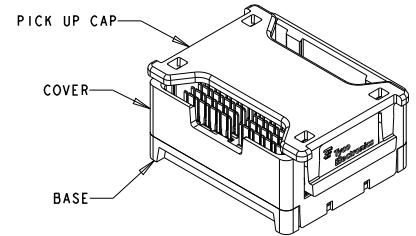
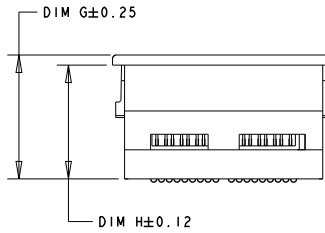
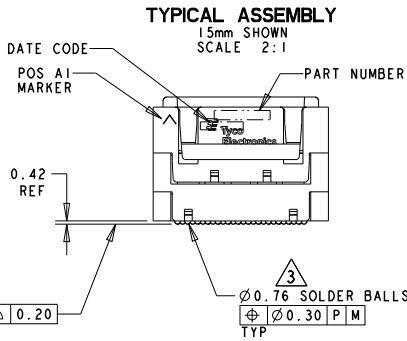


THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION  
 © COPYRIGHT 20 BY TYCO ELECTRONICS CORPORATION, ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS			
P	LTR	DESCRIPTION	DATE	DWN	APVD
DY	-				
A2		REVISED PER ECR-10-013879	01JUL2010	SYJ	LSF



**ISOMETRIC VIEW**  
 TYPICAL CONFIGURATION FOR  
 15mm & 20mm ASSEMBLY  
 SCALE 2:1



**ISOMETRIC VIEW**  
 TYPICAL CONFIGURATION FOR  
 10mm, 12mm & 13mm ASSEMBLY  
 SCALE 2:1

<small>THIS DRAWING IS A CONTROLLED DOCUMENT FOR TYCO ELECTRONICS CORPORATION          IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION          SHOULD BE CONTACTED FOR THE LATEST REVISION.</small>		DWN P BRANDBERG 18JAN05 CHK D WERTZ 20JAN05 APVD D WERTZ 20JAN05	<b>Tyco Electronics</b> Singapore		
DIMENSIONS: mm		PRODUCT SPEC 108-2143 APPLICATION SPEC 114-13101	NAME <b>STEP-Z, PLUG ASSEMBLY,          104 SIGNAL POSITION</b>		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±: 1 PLC ±0.3 2 PLC ±0.10 3 PLC ±0.050 4 PLC ±: ANGLES ±2°		WEIGHT -	SIZE A3	CAGE CODE 00779	DRAWING NO C-1761612
MATERIAL 1		FINISH 2		RESTRICTED TO -	
CUSTOMER DRAWING			SCALE -	SHEET 1 OF 3	REV A2

AMP 1470-19 REV 31MAR2000

4

3

2


1

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION 20  
 © COPYRIGHT 20 BY TYCO ELECTRONICS CORPORATION, ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS				
P	LTR	DESCRIPTION	DATE	DWN	APVD	
-	-	SEE SHEET 1	-	-	-	

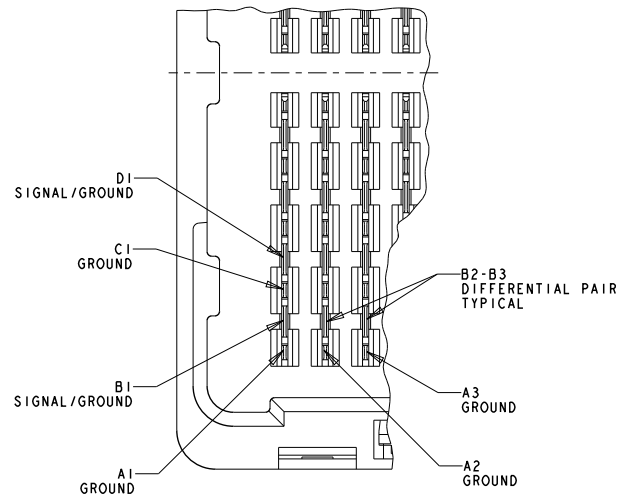
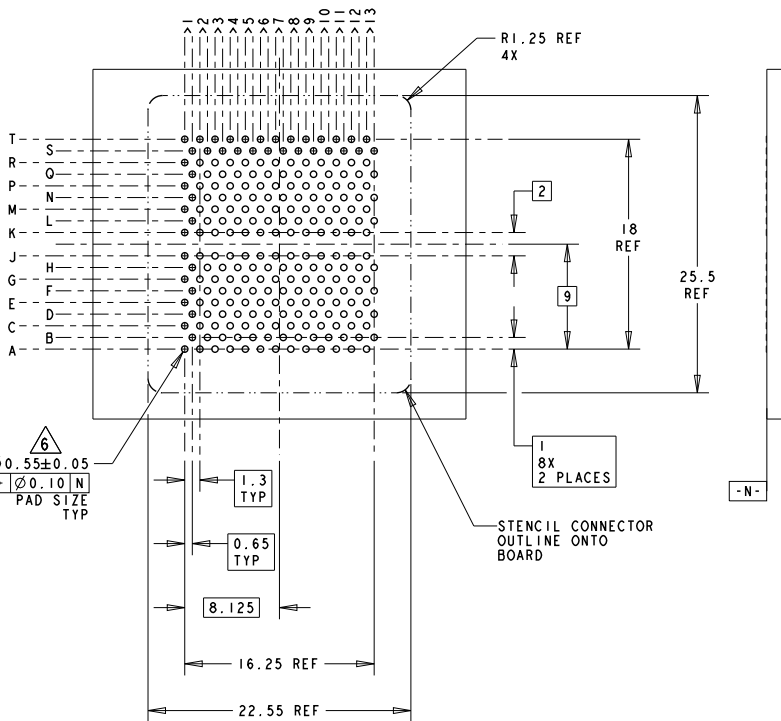
- 1 MATERIAL:  
 BASE, SPACER, COVER: THERMOPLASTIC  
 PICK UP CAP: THERMOPLASTIC  
 CONTACT: COPPER ALLOY  
 SOLDER BALL: Sn/Pb FOR P/N 1761612-1 THRU 5-1761612-0  
 Sn/Ag FOR P/N 5-1761612-1 THRU 9-1761612-9
- 2 FINISH:  
 CONTACT: 0.00076 MIN GOLD OVER 0.00127 MIN NICKEL.  
 (30µ" MIN GOLD OVER 50µ" MIN NICKEL)
- 3 SOLDER BALLS WILL NOT BE PERFECT  
 SPHERICAL SHAPE DUE TO REFLOW ATTACHMENT.
- 4 CONTACTS IN ROWS A,C,E,G,J,K,M,P,R, AND T  
 ARE SINGLE BEAM CONTACTS,  
 TYPICALLY USED AS GROUND PINS.  
 (NOTE: CONTACTS IN ROW J & K ARE TIED  
 TOGETHER [COMMONED]).
- 5 CONTACTS IN ROWS B,D,F,H,L,N,O, AND S  
 ARE DUAL BEAM CONTACTS,  
 TYPICALLY USED AS SIGNAL PINS.
- 6 SPECIFIED POSITIONAL TOLERANCE DEFINES PAD TO PAD  
 LOCATION WITHIN LAND PATTERN. POSITIONAL TOLERANCE  
 OF LAND PATTERN TO FUDICIAL MARKS OR PCB DATUMS  
 SHALL BE DEFINED BY CUSTOMER. FOR RECOMMENDED  
 PRODUCT APPLICATION AND PCB DESIGN DETAILS, SEE  
 APPLICATION SPEC 114-13101.

DIM H	DIM G	LOAD STYLE	DESCRIPTION	PART NUMBER
19.65	20.95	-	20mm Sn/Ag	7-1761612-0
14.65	15.95	-	15mm Sn/Ag	6-1761612-5
12.65	13.95	-	13mm Sn/Ag	6-1761612-3
11.65	12.95	-	12mm Sn/Ag	6-1761612-2
9.65	10.95	-	10mm Sn/Ag	6-1761612-0
19.65	20.95	-	20mm Sn/Pb	2-1761612-0
14.65	15.95	-	15mm Sn/Pb	1-1761612-5
12.65	13.95	-	13mm Sn/Pb	1-1761612-3
11.65	12.95	-	12mm Sn/Pb	1-1761612-2
9.65	10.95	-	10mm Sn/Pb	1-1761612-0

<small>THIS DRAWING IS A CONTROLLED DOCUMENT FOR TYCO ELECTRONICS CORPORATION          IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION          SHOULD BE CONTACTED FOR THE LATEST REVISION.</small>		DWN P BRANDBERG 18 JAN 05 CHK D WERTZ 20 JAN 05 APVD D WERTZ 20 JAN 05	Tyco Electronics Singapore
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±. 1 PLC ±0.3 2 PLC ±0.10 3 PLC ±0.050 4 PLC ±. ANGLES ±2°	NAME STEP-Z, PLUG ASSEMBLY, 104 SIGNAL POSITION	RESTRICTED TO
MATERIAL - FINISH -		APPLICATION SPEC - WEIGHT - SIZE 3 CAGE CODE 00779 DRAWING NO C-1761612	CUSTOMER DRAWING SCALE - SHEET 2 OF 3 REV A2

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION 20  
 © COPYRIGHT 20 BY TYCO ELECTRONICS CORPORATION, ALL RIGHTS RESERVED.

LOC	DIST	REVISIONS			
P	LTR	DESCRIPTION	DATE	DWN	APVD
DY	-	SEE SHEET 1	-	-	-



**PLUG INTERFACE**  
SCALE 8:1

**BOARD PATTERN**  
SCALE 3:1

<small>THIS DRAWING IS A CONTROLLED DOCUMENT FOR TYCO ELECTRONICS CORPORATION. IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION SHOULD BE CONTACTED FOR THE LATEST REVISION.</small>		DWN P BRANDBERG 18 JAN 05		
DIMENSIONS: mm		CHK D WERTZ 20 JAN 05	NAME	
		APVD D WERTZ 20 JAN 05	STEP-Z, PLUG ASSEMBLY, 104 SIGNAL POSITION	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ±0.3 2 PLC ±0.10 3 PLC ±0.050 4 PLC ± ANGLES ±°		PRODUCT SPEC	SIZE	RESTRICTED TO
MATERIAL		APPLICATION SPEC	CAGE CODE	
FINISH		WEIGHT	DRAWING NO	
		CUSTOMER DRAWING	A3 00779	
			C=1761612	
			SCALE	SHEET 3 OF 3 REV A2

AMP 1470-19 REV 31MAR2000