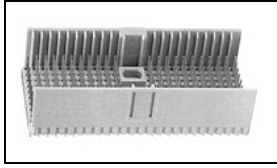TE connectivity

646346-1 Product Details

646346-1

TE Internal Number: 646346-1

✔ Active

2mm Hard Metric PCB Mount Connectors (Z-PACK 2mm HM)

Not EU RoHS or ELV Compliant (Find RoHS Compliant Alternates)

Product Highlights:
- Connector
- Connector Assembly
- Connector Style = Plug
- Type = Type D, 25 Column
- Interface Type = 2mm HM

Documentation & Additional Information

Product Drawings:
- MALE ASSEMBLY, Z-PACK 2mm HM, TYPE D (PDF, English)

Catalog Pages/Data Sheets:
- None Available

Product Specifications:
- Connector, Z-PACK, 8 Row, 2mm HM (PDF, English)

Application Specifications:
- Z-PACK 2mm HM Interconnection System for Board-to-Bo... (PDF, English)

Instruction Sheets:
- None Available

CAD Files: (CAD Format & Compression Information)
- 2D Drawing (DXF, Version K)
- 3D Model (IGES, Version K)
- 3D Model (STEP, Version K)

Additional Information:
- Product Line Information

Related Products:
- Tooling
- Mating Products (1)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:
- Product Type = Connector
- Connector Type = Connector Assembly
- PCB Mounting Orientation = Vertical

Mechanical Attachment:
- Board Mount = Fixed Board
- Front Mating Level = Level 1

Electrical Characteristics:
- Shielded = No

Termination Features:
- Interface Type = 2mm HM
- Termination End Plating = Tin-Lead over Nickel

Dimensions:
- Module Length (mm [in]) = 50.00 [1.968]

Body Features:
- Type = Type D, 25 Column

Contact Features:
- Contact Configuration = ACTION PIN Post, Signal
- Feedthrough Post Length (mm [in]) = 3.70 [0.145]
- CompactPCI = No
- Contact Plating, Mating Area, Material = Gold (30)
- Grounding Contact = Without
- Contact Style = Short Tail
- Contact Base Material = Phosphor Bronze

Housing Features:
- Connector Style = Plug
- Mating Alignment = With
- Mating Alignment Type = Multi-Purpose Center
- Housing Color = Gray
- Housing Material = Polyester GF
- UL Flammability Rating = UL 94V-0

Configuration Features:
- Number of Rows = 8
- Number of Positions = 176
- Crosstalk Version = Standard
- Rows Loaded = F, E, D, C, B, A, H, G

Industry Standards:
- RoHS/ELV Compliance = Not ELV/RoHS compliant
- Lead Free Solder Processes = Not relevant for lead free process

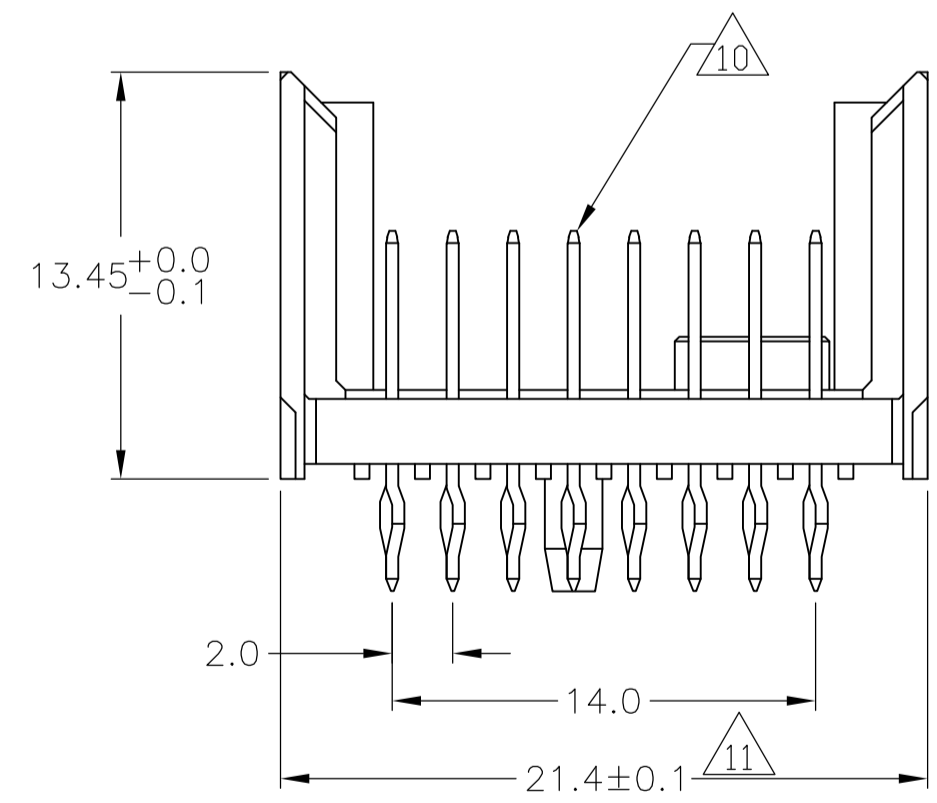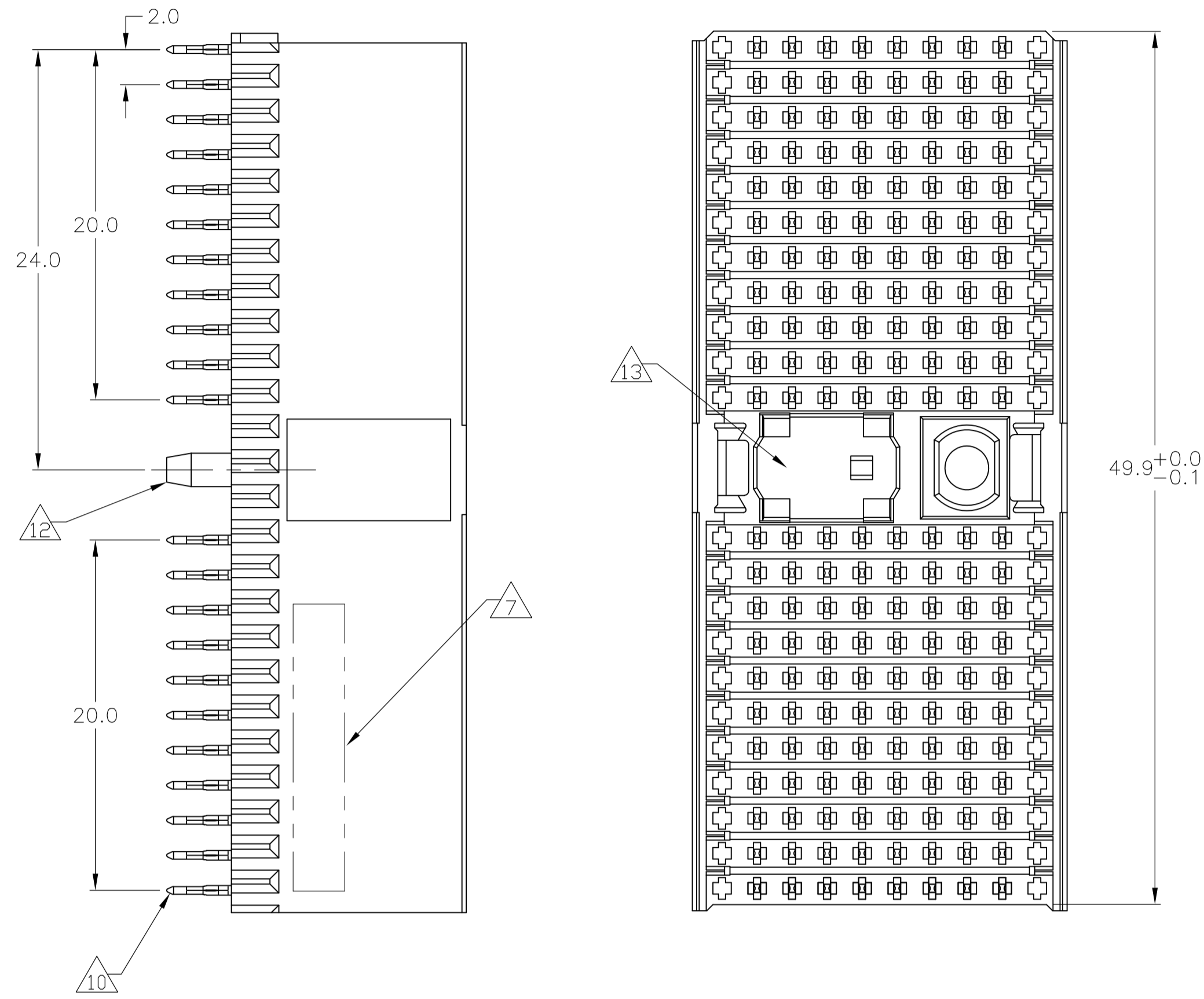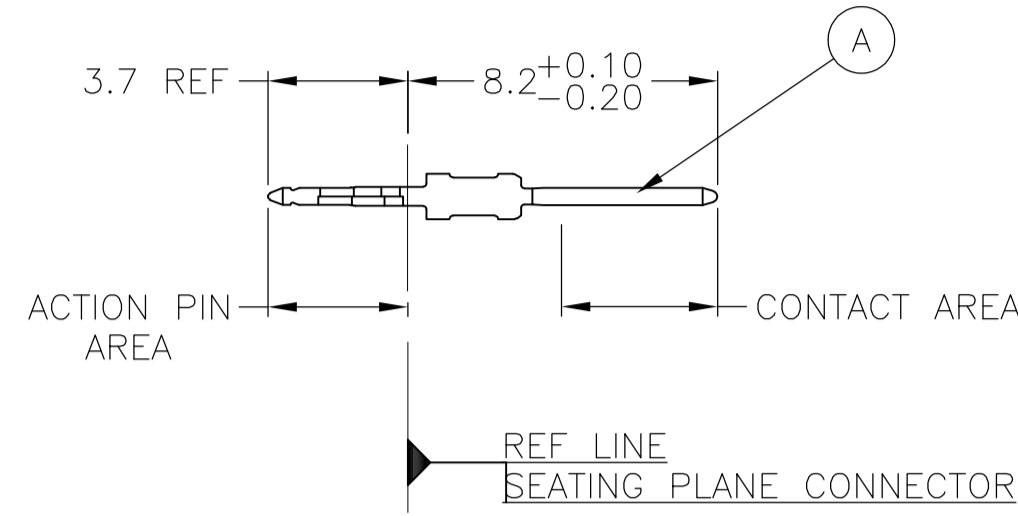**Packaging Features:**
- Packaging Quantity = 11

Other:
- Brand = AMP

8	7	6	5	4	3	2	1

CONNECTOR ASSEMLBY EXAMPLARY LOADED ⟨9⟩

2.0
20.0
24.0
20.0

⟨13⟩
⟨12⟩
⟨7⟩
⟨10⟩

49.9 +0.0 −0.1

CONTACT DIMENSIONS
SCALE 5:1

3.7 REF
8.2 +0.10 −0.20
Ⓐ

ACTION PIN AREA
CONTACT AREA

REF LINE
SEATING PLANE CONNECTOR

CONTACT LAYOUT

	z	a	b	c	d	e	f	g	h	i
1		A	A	A	A	A	A	A	A	
2		A	A	A	A	A	A	A	A	
3		A	A	A	A	A	A	A	A	
4		A	A	A	A	A	A	A	A	
5		A	A	A	A	A	A	A	A	
6		A	A	A	A	A	A	A	A	
7		A	A	A	A	A	A	A	A	
8		A	A	A	A	A	A	A	A	
9		A	A	A	A	A	A	A	A	
10		A	A	A	A	A	A	A	A	
11		A	A	A	A	A	A	A	A	

MULTI PURPOSE CENTER

	z	a	b	c	d	e	f	g	h	i
15		A	A	A	A	A	A	A	A	
16		A	A	A	A	A	A	A	A	
17		A	A	A	A	A	A	A	A	
18		A	A	A	A	A	A	A	A	
19		A	A	A	A	A	A	A	A	
20		A	A	A	A	A	A	A	A	
21		A	A	A	A	A	A	A	A	
22		A	A	A	A	A	A	A	A	
23		A	A	A	A	A	A	A	A	
24		A	A	A	A	A	A	A	A	
25		A	A	A	A	A	A	A	A	

⟨10⟩
13.45 +0.0 −0.1
2.0
14.0
21.4 ±0.1
⟨11⟩

RECOMMENDED PCB-HOLE LAYOUT
COMPONENT SIDE SHOWN

PLATED THRU HOLES PARAMETERS
REFERENCE APPLICATION SPECIFICATION

10 SPACES @ 2.0 = 20.0
8.0
ø2.5±0.10
10 SPACES @ 2.0 = 20.0

7 SPACES @ 2.0 = 14.0

h
g
f
e
d
c
b
a
1   11   15   25
⊕ 0.1
4.0
ø2.0 +0.1 −0.0
⟨8⟩
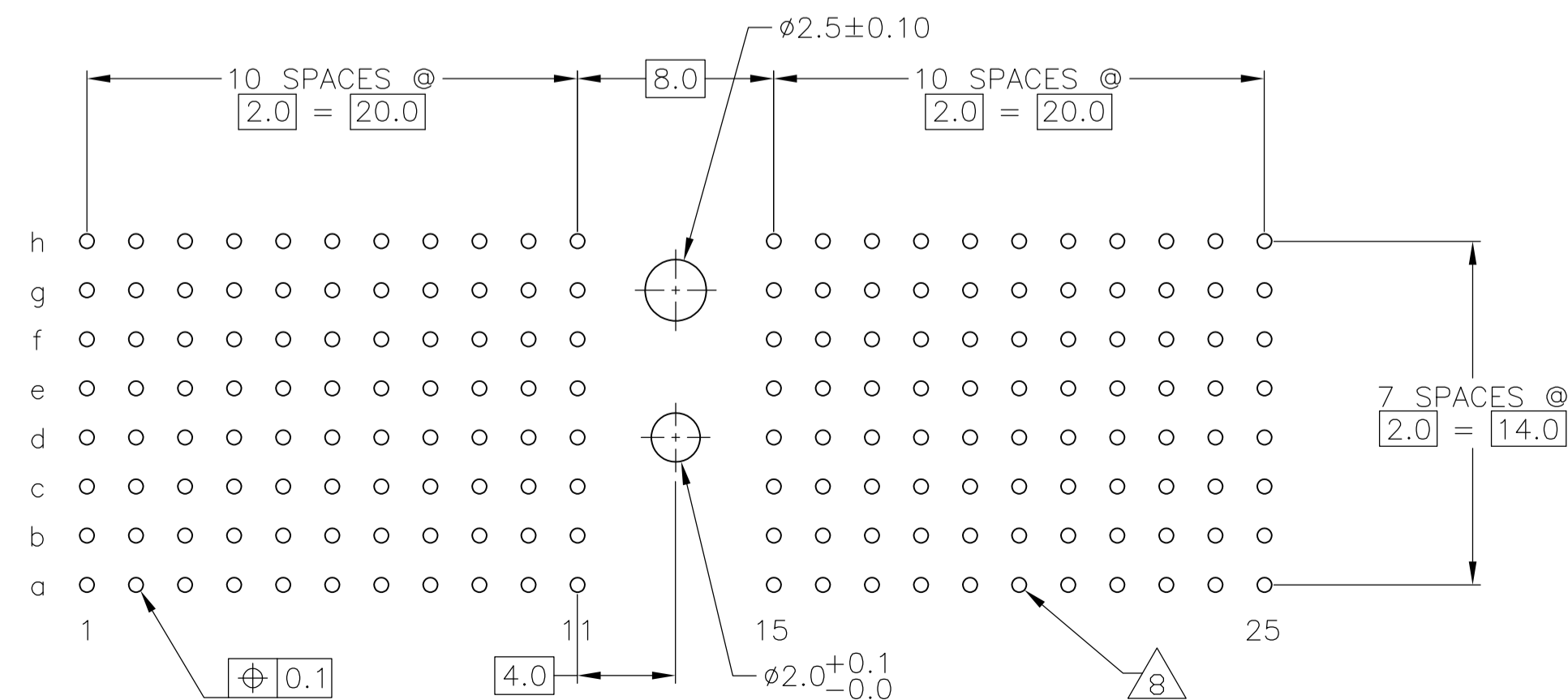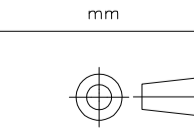
⟨2⟩⟨3⟩⟨15⟩	3-646346-0
⟨2⟩⟨6⟩⟨14⟩	1-646346-9
OBSOLETE ⟨2⟩⟨5⟩⟨14⟩	646346-9
⟨2⟩⟨4⟩	646346-4
⟨2⟩⟨3⟩	646346-1
FINISH	PART NUMBER

AMP 4805 REV 31MAR2000

LOC	DIST	REVISIONS				
AD	00					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
		—		SEE SHEET 1	—	—	—

△1   MATERIAL:
     CONTACT: PHOSPHOR BRONZE.
     HOUSING: GLASS-FILLED POLYESTER.

△2   GENERAL PLATING SPECIFICATION: UNDERPLATING
(ENTIRE CONTACT): 1.27µm MIN NICKEL AND ACTION
PIN: 0.5µm MIN TIN/LEAD.
FOR PLATING OF MATING SURFACES SEE APPLICABLE
SPECIFICATION REFERENCE FOR EACH DASH NUMBER.

△3   CONFORMS TO ALL TESTING ACCORDING TO IEC 61076-4-101
PERFORMANCE LEVEL 2.

△4   CONFORMS TO ALL TESTING ACCORDING TO IEC 61076-4-101
PERFORMANCE LEVEL 1.

△5   CONNECTOR TESTED AND QUALIFIED AGAINST TELCORDIA GR-1217-CORE QUALITY LEVEL 3,
CENTRAL OFFICE APPLICATIONS.

△6   CONNECTOR TESTED AND QUALIFIED AGAINST TELCORDIA GR-1217-CORE QUALITY LEVEL 3,
UNCONTROLLED ENVIROMENT APPLICATIONS.

△7   CONNECTOR MARKED WITH PART NUMBER AND DATE CODE.
ADDITIONAL CHARACTERS OR MARKINGS, AS WELL AS THE LOCATION OF THE MARKINGS,
MAY BE ADDED FOR TRACEABILITY BASED UPON MANUFACTURERS DISCRETION.

△8   PLATED-THROUGH HOLES AT 2x2mm SQUARE GRID
PATTERN DEFINED BY CONTACT LAYOUT.

△9   FOR ACTUAL PIN LOADING SEE "CONTACT LAYOUT".

△10   FOR ACTUAL PIN DIMENSIONS SEE "CONTACT DIMENSIONS".

△11   TO BE MEASURED AT BOTTOM OF SHROUD.

△12   POLARIZATION FEATURE.

△13   AREA RESERVED FOR KEYING PART (BASIC P/N 100525)

△14   CONNECTOR LUBRICATED WITH BELCORE APPROVED LUBRICANT,
TECHNICAL REFERENCE: TR-NWT-001217 ISSUE 1, SEP 1992.

△15   0.76µm MIN GOLD PLATING AT MATING SURFACES.

THIS DRAWING IS A CONTROLLED DOCUMENT.	DWN B.CARBO 07JAN05	Tyco Electronics	Tyco Electronics Corporation Harrisburg, Pa 17105-3608
	CHK G.SKIPPER 07JAN05		
DIMENSIONS: mm	APVD G.SKIPPER 07JAN05	NAME	
TOLERANCES UNLESS OTHERWISE SPECIFIED:	PRODUCT SPEC 108-1622	MALE ASSEMBLY, Z-PACK 2mm HM, TYPE D	
0 PLC ± 1 PLC ± 0.1 2 PLC ± 0.2 3 PLC ± 4 PLC ± ANGLES ±	APPLICATION SPEC 114-19029		
MATERIAL SEE SHEET 1	FINISH SEE SHEET 1	WEIGHT —	SIZE A1	CAGE CODE 00779	DRAWING NO C-646346	RESTRICTED TO —
CUSTOMER DRAWING		SCALE 4:1	SHEET 2 OF 2	REV J

AMP 4805 REV 31MAR2000