

REV. A	SHEET 1 OF 4	DOCUMENT NO. HDB-M4-XXXXXXX
REVISIONS		
LTR	DESCRIPTION	DATE
A	INITIAL RELEASE	08/08/2007

HDB-M4-XXXXXXX

SHEET 1 OF 4

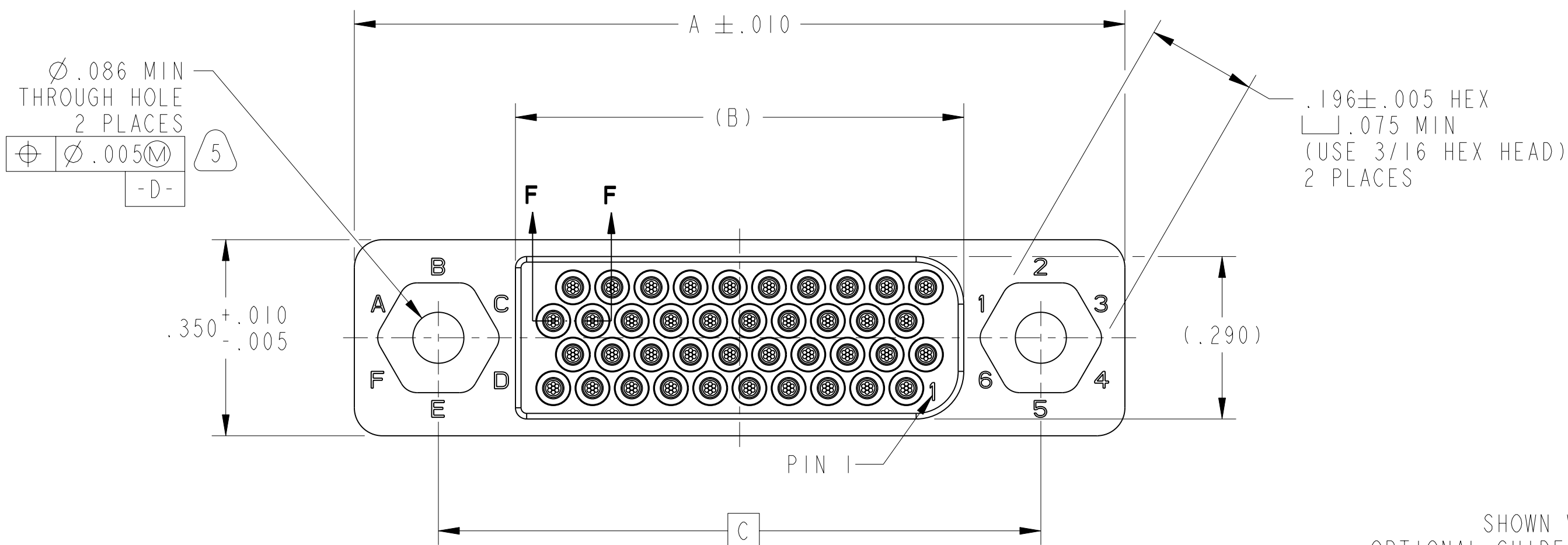
REV. A

C

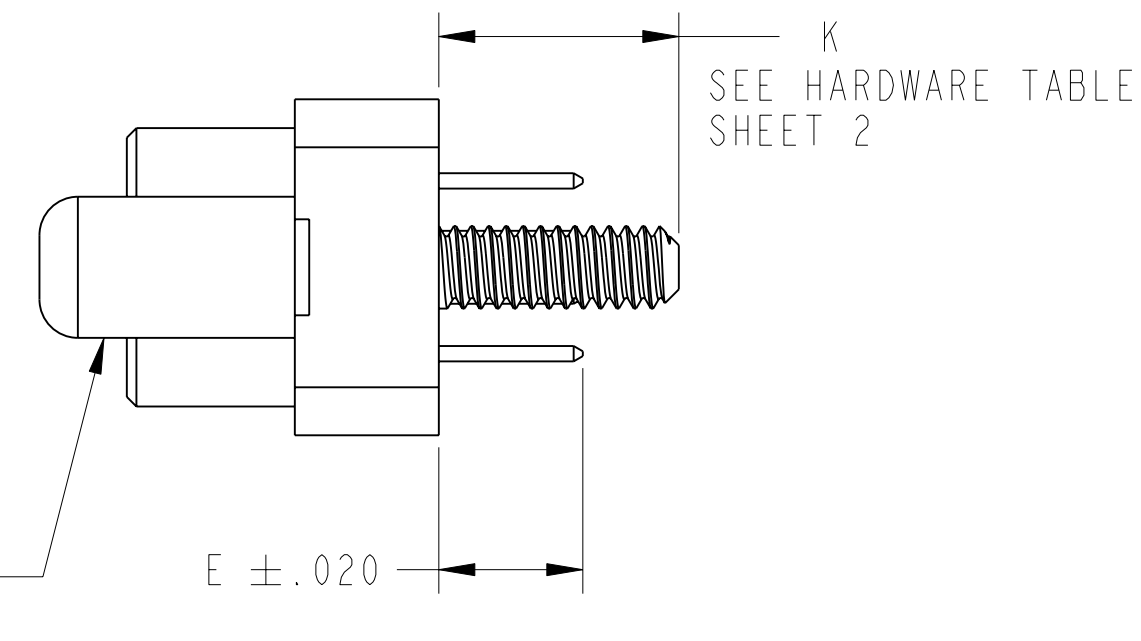
B

A

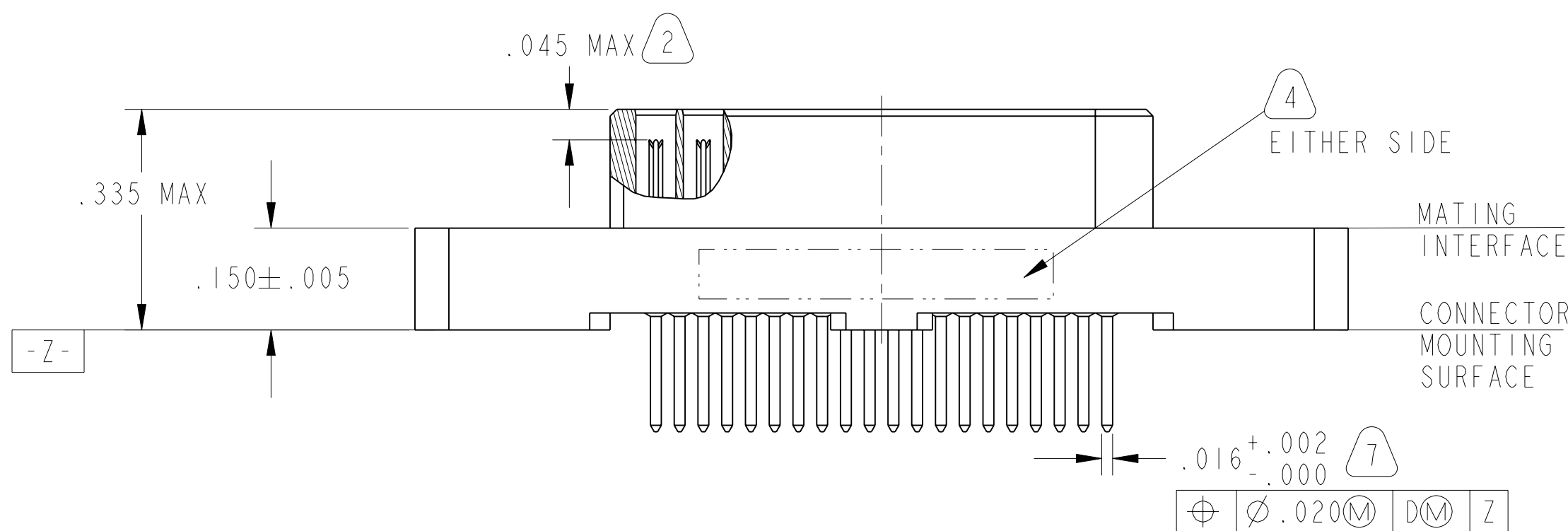
FORMAT: C-U-E-1



.196±.005 HEX
 .075 MIN
 (USE 3/16 HEX HEAD)
 2 PLACES



SHOWN WITH
 OPTIONAL GUIDE PIN



SECTION F-F

NOTES:

THE USE OF THIS DOCUMENT IS UNLIMITED.
 HOWEVER, DOCUMENTS REFERENCED HEREON
 MAY CONTAIN LIMITED RIGHTS DATA.

N/A
 NEXT ASSEMBLY

PRO/ENGINEER INFORMATION
 Pro/e Model Used:
 HDB-M4-XXXXXXX.ASSEM
 Drawing Name:
 HDB-M4-XXXXXXX

UNLESS OTHERWISE SPECIFIED	SPECIFICATIONS	POS	QTY	PART NUMBER	DESCRIPTION	NOTE
LINEAR DIMENSIONS ARE IN INCHES TOLERANCES: .XXXX = ±.0005 ANGLES= ±2° .XXX = ±.010 .XX = ±.03 .X = ±.1 DIM. & TOL. PER ASME Y14.5M; DRM PER MIL-DTL-31000; OTHER Amphenol Stds. PER 9-3800 LEGENDS: =FLAG NOTE CALL OUT REFERENCE ONLY	MATERIAL SPEC.	APPROVALS		DATE	PARTS LIST	
	N/A	PREPARED BY	DMORSE	13-Jul-07	AMPHENOL CORPORATION 40-60 DELAWARE AVENUE SIDNEY, N.Y. 13858	
	PROCESS SPEC.	ENGINEER IN CHARGE	BCHUBB		4 ROW MOTHER BOARD CONNECTOR HDB3 SERIES	
	9-3895 9-3856-5	DESIGN MANAGER	EHICKEY		SIZE	REV. A
		DESIGN ACTIVITY GROUP	BLP		CAGE CODE	DOCUMENT NO.
		THIRD ANGLE PROJECTION			77820	HDB-M4-XXXXXXX
					SCALE: 5.0	SHEET 1 OF 4
					REF. N/A	

HDB-M4-XXXXXXX

SHEET 1 OF 4

REV. A

VERSION

REVISION

RELEASE STATE

REV.

SHEET 1 OF 4

HDB-M4-XXXXXXX

HDB-M4-XXX X XX X X

EXAMPLE: HDB-M4-040 M 20 2 X

CONTACT TERMINATION FINISH	
2	GOLD PLATED IN ACCORDANCE WITH MIL-G-45204, TYPE II, .000030 MIN THICK GOLD OVER .000050 MIN THICK NICKEL
5	TIN PLATED IN ACCORDANCE WITH ASTM B545, .00010 MIN THICK MATTE TIN OVER .00010 MIN THICK NICKEL. 6
6	TIN-LEAD PLATED IN ACCORDANCE WITH SAE-AMS-P-81728, .00010 MIN THICK TIN-LEAD OVER .00010 MIN THICK COPPER

HARDWARE (SUPPLIED UNASSEMBLED)		
	TYPE	STICKOUT (DIM. K)
X	NO HARDWARE	N/A
G	POLARIZATION KEY (QTY 2)	.250
H	POLARIZATION KEY (QTY 2)	.500
J	POLARIZATION KEY (QTY 2)	.750
T	GUIDE PIN (QTY 2)	.250
U	GUIDE PIN (QTY 2)	.500
V	GUIDE PIN (QTY 2)	.750

TERMINATION		
	TYPE	STICKOUT (DIM E)
20	PCB, STRAIGHT, .016 DIA.	.060
21	PCB, STRAIGHT, .016 DIA.	.090
22	PCB, STRAIGHT, .016 DIA.	.120
23	PCB, STRAIGHT, .016 DIA.	.150
24	PCB, STRAIGHT, .016 DIA.	.180
25	PCB, STRAIGHT, .016 DIA.	.210
26	PCB, STRAIGHT, .016 DIA.	.240
27	PCB, STRAIGHT, .016 DIA.	.270
28	PCB, STRAIGHT, .016 DIA.	.300
29	PCB, STRAIGHT, .016 DIA.	.360
30	PCB, STRAIGHT, .016 DIA.	.420

BRUSH WIRE PLATING (CONTACT INTERFACE)	
M	0.000050 Au MIN THK OVER NICKEL
C	0.000020 Au MIN THK OVER NICKEL

CONNECTOR DIMENSIONS				
	NUMBER OF CONTACTS	DIMENSION A	DIMENSION B	DIMENSION C
040	40	1.375	.800	1.075
080	80	2.075	1.500	1.775
120	120	2.775	2.200	2.475
160	160	3.475	2.900	3.175

NOTES:

THE USE OF THIS DOCUMENT IS UNLIMITED. HOWEVER, DOCUMENTS REFERENCED HEREON MAY CONTAIN LIMITED RIGHTS DATA.

SIZE C	CAGE CODE 77820	DOCUMENT NO. HDB-M4-XXXXXXX	REV. A
SCALE: 5.0		REF: N/A	SHEET 2 OF 4

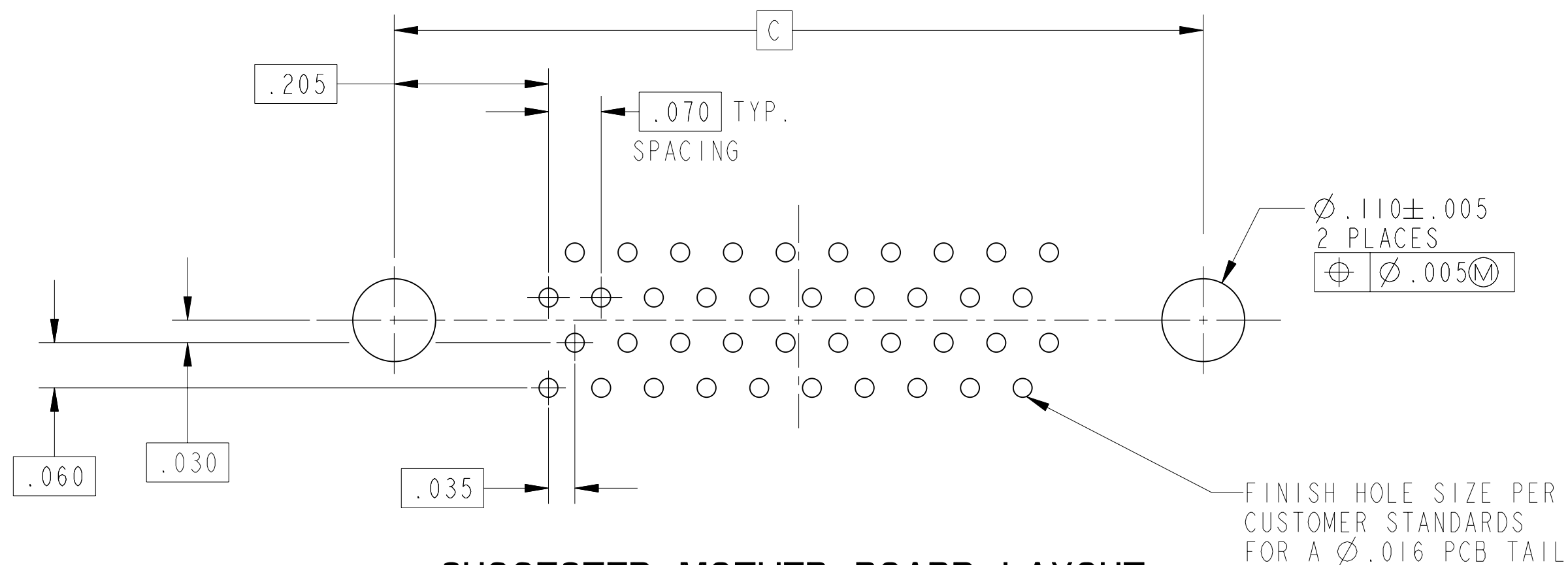
HDB-M4-XXXXXXX SHEET 2 OF 4 REV. A RELEASE STATE Released

HDB-M4-XXXXXXX SHEET 2 OF 4 REV. A

HDB-M4-XXXXXXXX

SHEET 3 OF 4

REV. A



SUGGESTED MOTHER BOARD LAYOUT

SCALE 6.000

NOTES:

THE USE OF THIS DOCUMENT IS UNLIMITED.
HOWEVER, DOCUMENTS REFERENCED HEREON
MAY CONTAIN LIMITED RIGHTS DATA.

FORMAT: C-U, E-1

D

C

RELEASE STATE

REVISED

Released

REV. A

SHEET 3 OF 4

HDB-M4-XXXXXXXX

HDB-M4-XXXXXXX

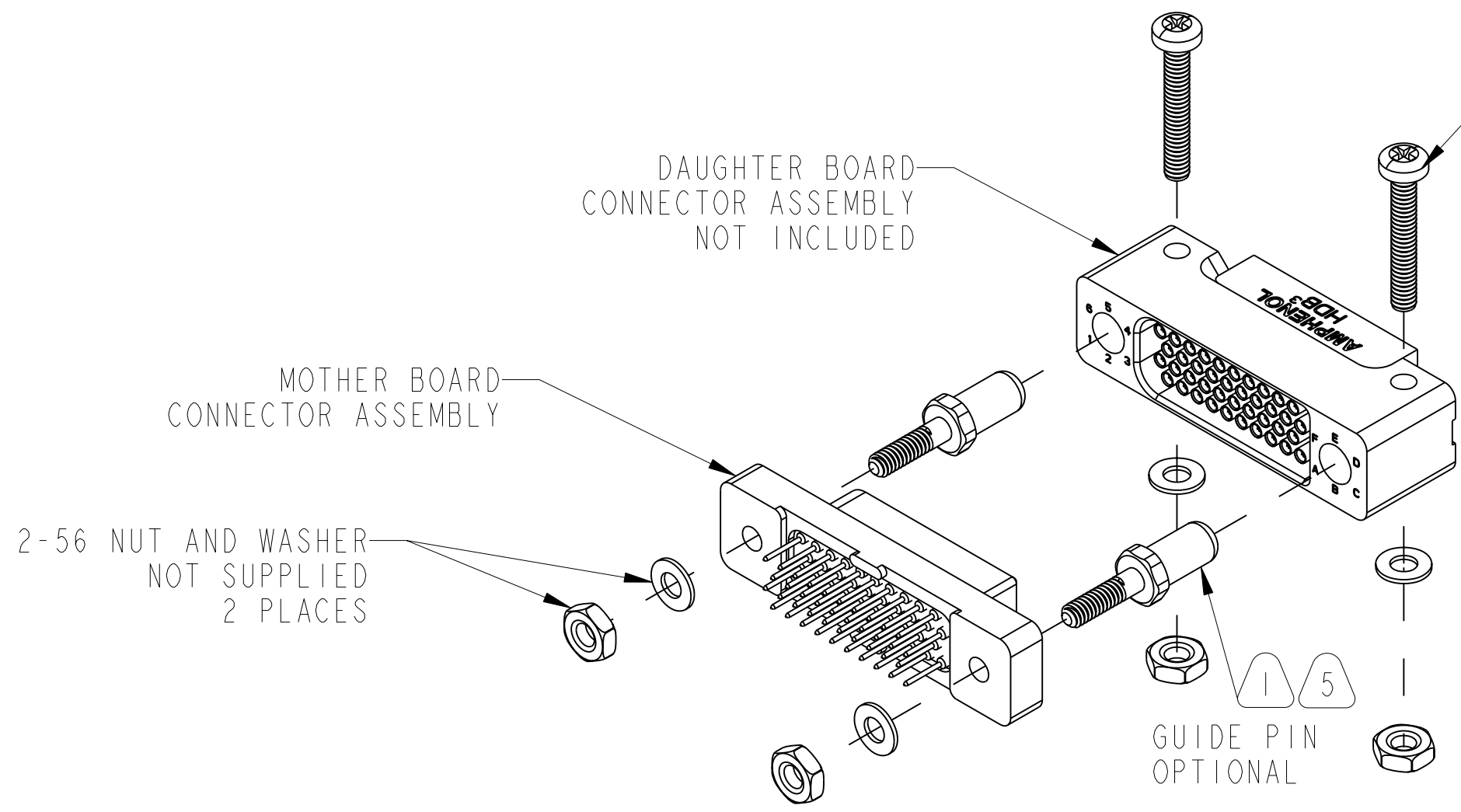
SHEET 4 OF 4

REV. A

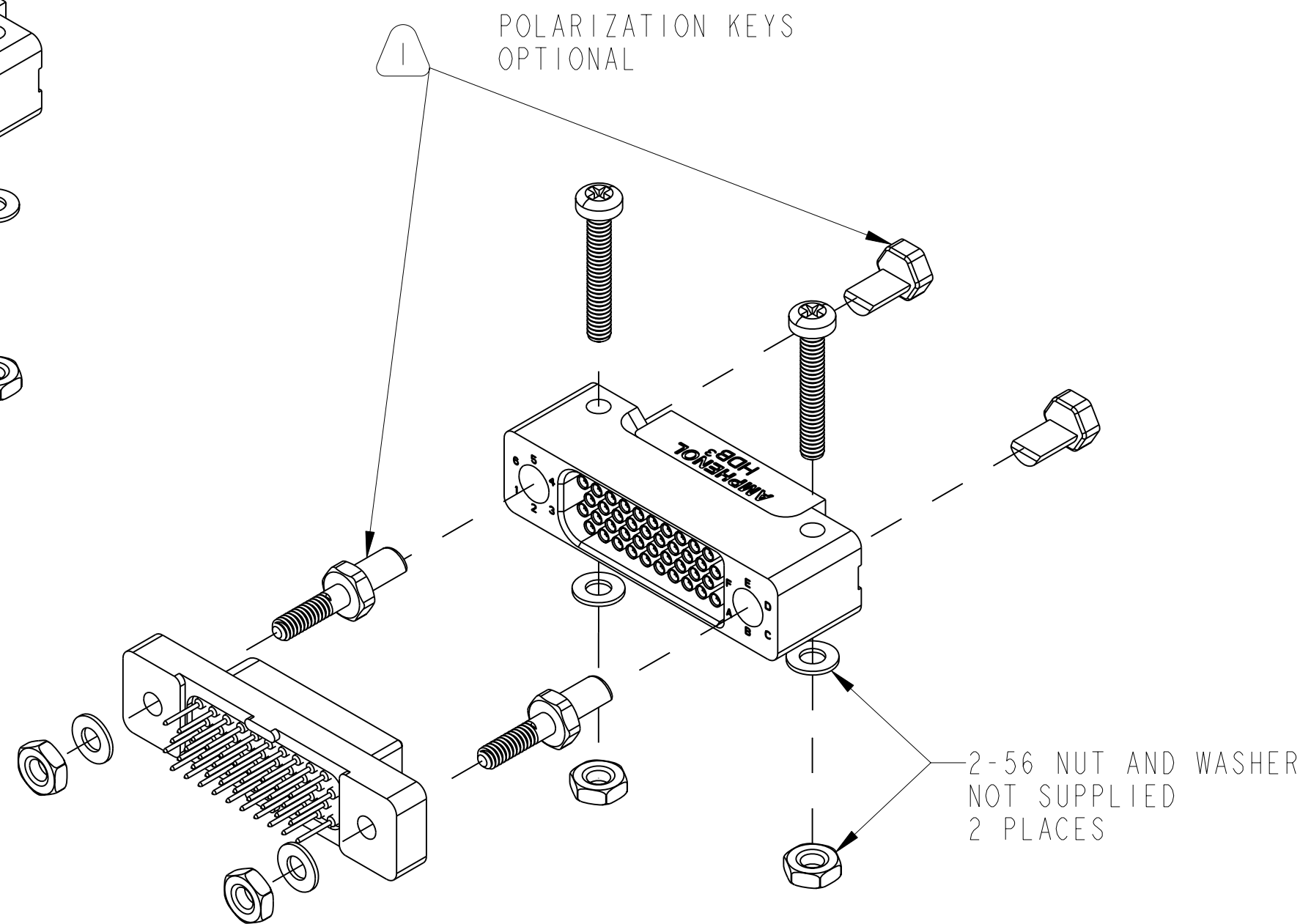
C

B

A



EXPLODED ISOMETRIC VIEW SHOWN WITH OPTIONAL GUIDE PIN



EXPLODED ISOMETRIC VIEW SHOWN WITH OPTIONAL KEYING

- 7. CONTACT ASSEMBLIES ARE NON-REPLACEABLE.
- 6. RoHS COMPLIANT FOR TERMINATION FINISH TIN PLATE OVER NICKEL.
- 5. WHEN NOT USING OPTIONAL GUIDE PIN OR POLARIZATION KEYS USE A 2-56 HEX HEAD SCREW FOR MOUNTING. (NOT SUPPLIED)
- 4. INK STAMP "AMPHENOL" 77820, PART NUMBER AND DATE CODE ON INDICATED SURFACE PER 9-3856-5. DATE CODE PER 9-3895, CHARACTERS TO BE .062 ±.020 HIGH.
- 3. FOR MATING DAUGHTER CONNECTOR ASSEMBLY SEE DRAWING HDB-D4-XXXXXXX.
- 2. INDICATED DIMENSION IS TO POINT OF MINIMUM ELECTRICAL ENGAGEMENT.
- 1. POLARIZATION KEYS OR GUIDE PINS ARE OPTIONAL. WHEN USING, A QUANTITY OF 2 ARE REQUIRED PER CONNECTOR. (WHEN USING KEYS, MATING CONNECTOR MUST ALSO USE KEYS.)

NOTES:

THE USE OF THIS DOCUMENT IS UNLIMITED. HOWEVER, DOCUMENTS REFERENCED HEREON MAY CONTAIN LIMITED RIGHTS DATA.

REPLACEMENT KEYS/GUIDE PINS			
HW ID	TYPE	STICKOUT (DIM K)	PART NUMBER
G	POLARIZATION KEY (QTY 2)	.250	HDB-508802-001
H	POLARIZATION KEY (QTY 2)	.500	HDB-508802-002
J	POLARIZATION KEY (QTY 2)	.750	HDB-508802-003
T	GUIDE PIN (QTY 2)	.250	HDB-508803-001
U	GUIDE PIN (QTY 2)	.500	HDB-508803-002
V	GUIDE PIN (QTY 2)	.750	HDB-508803-003

SIZE C	CAGE CODE 77820	DOCUMENT NO. HDB-M4-XXXXXXX	REV. A
SCALE: 1.0		REF: N/A	SHEET 4 OF 4

RELEASE STATE Released

SHEET 4 OF 4

HDB-M4-XXXXXXX