

8 7 6 5 4 3 2 1

BACKPLANE MODULE
ASSEMBLY PART NUMBER ASSIGNMENT ⑥

MODULE CONFIGURATION
GUIDANCE/POLARIZING TYPE

499 - X 1 XX - X X X

SIGNAL CONTACT LOAD (SEE TABLE 2)
(PIN LENGTH)
1 = 4.75
2 = 6.25
3 = 4.25
4 = 5.15

PLATING CODE ⑦
0 = 735 4 = 804
1 = 732 5 = 803
2 = 769 6 = 806
3 = 768 7 = 805

POLARIZING PIN ①
ORIENTATION CODE (SEE TABLE 4)

NUMBER OF COLUMNS (SEE TABLE 1)
10 = 10 COLUMN MODULE
25 = 25 COLUMN MODULE

TABLE 1

ASSEMBLY PART NUMBER	BACKPLANE GUIDANCE POLARIZING MODULE	K	(L)	M	P	TOTAL NUMBER OF SIGNAL CONTACTS	TOTAL NUMBER OF GROUND SHIELDS
499-(5.6.8.9)110-XXX	499-0110-070	9	(18.00)	18.00	27	60	10
499-(5.6.8.9)125-XXX	499-0125-070	24	(48.00)	48.00	57	150	25

TABLE 2

ASSEMBLY PART NUMBER	SIGNAL CONTACT	CONTACT LENGTH
499-(5.8)1XX-XX1	260-0022-⑦	4.75
499-(5.8)1XX-XX2	260-0021-⑦	6.25
499-(5.8)1XX-XX3	260-0023-⑦	4.25
499-(5.8)1XX-XX4	260-0024-⑦	5.15
499-(6.9)1XX-XX1	260-0002-⑦	4.75
499-(6.9)1XX-XX2	260-0001-⑦	6.25
499-(6.9)1XX-XX3	260-0003-⑦	4.25
499-(6.9)1XX-XX4	260-0004-⑦	5.15

TABLE 3 (SEE DETAIL W. SHT 2)

ASSEMBLY PART NUMBER	SHIELD CONTACT	CONTACT LENGTH
499-51XX-XXX	279-0022-⑦	5.3
499-61XX-XXX	279-0002-⑦	5.3
499-81XX-XXX	279-0024-⑦	5.5
499-91XX-XXX	279-0004-⑦	5.5

TABLE 5 ⑦⑧

GUIDE/POLARIZING PIN	PART NUMBER	N	P
STANDARD GUIDE PIN	564-0385-553	19.3	-
CUSTOM GUIDE PIN	564-0420-553	17.3	-
CUSTOM GUIDE PIN	564-0487-553	13.4	-
STANDARD POL PIN	564-0387-540	-	12.6
CUSTOM POL PIN	564-0457-553	-	12.6

TABLE 4 ①

PART NUMBER 499-(5.6.8.9)1XX-(XXX)	-0XX	-AXX	-BXX	-CXX	-DXX	-EXX	-FXX	-GXX	-HXX
POLARIZING PIN ORIENTATION									

15. DATUM -G- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST ROWS OF SIGNAL CONTACTS TAIL SIDE.

14. DATUM -F- IS DEFINED AS THE BOTTOM OF THE PLASTIC INSULATOR.

13. DATUM -E- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST COLUMNS OF SIGNAL CONTACTS TAIL SIDE.

12. DATUM -C- IS DEFINED AS THE CENTERLINE OF THE CONNECTOR MEASURED FROM THE TWO OUTERMOST COLUMNS OF SIGNAL CONTACT HOLES.

11. DATUM -B- IS DEFINED AS THE CENTERLINE OF THE TOP OF THE OUTERMOST WAFER SLOTS IN THE INSULATOR WALLS.

10. DATUM -A- IS DEFINED AS THE WAFER MATING SURFACE OF THE PLASTIC INSULATOR.

9. ROUTE DIFFERENTIAL PAIRS THROUGH ROWS A-B, D-E, AND G-H.

⑧. FOR HASL FINISH ONLY, PTH TO BE Ø0.61 - Ø0.495 mm.

⑦. LAST THREE DIGITS OF THE SIGNAL CONTACT AND SHIELD CONTACT PART NUMBERS ARE DETERMINED BY THE PLATING CODE. MATCHES PLATING DEFINED BY 9th DIGIT OF ASSEMBLY PART NUMBER.
735 - Ni SULFAMATE, STANDARD GOLD, LEADED
732 - Ni SULFAMATE, HIGH GOLD, LEADED
769 - Ni SULFAMATE, STANDARD GOLD, LEAD-FREE
768 - Ni SULFAMATE, HIGH GOLD, LEAD-FREE
804 - NANO Ni, STANDARD GOLD, LEADED
803 - NANO Ni, HIGH GOLD, LEADED
806 - NANO Ni, STANDARD GOLD, LEAD-FREE
805 - NANO Ni, HIGH GOLD, LEAD-FREE

⑥. IF MODULE PART NUMBER IS 499-7XXX-XXX OR 499-2XXX-XXX OR 499-LXXX-XXX OR 499-NXXX-XXX: PART REVISION, MODULE ORIENTATION, NUMBER OF COLUMNS AND SIGNAL CONTACT LOAD ARE NOT APPLICABLE.

⑤. PART MARKING AS FOLLOWS:
LINE 1: ATCSYYWWDHH (LOGO, YEAR, WEEK, DAY, HOUR)
LINE 2: MODULE PART NUMBER(499#####),
LINE 3: WORK ORDER NUMBER(VH#####), WHERE “*” DENOTES MANUFACTURING LOCATION.

④. OPEN, NOTCH END DESIGNATES COLUMN 1.

③. SHIELDS SHALL BE STRAIGHT WITH MAXIMUM ALLOWABLE BOW OF 0.15 MILLIMETERS ON EITHER SIDE OF SHIELD. SEE DETAIL “X”.

②. WHEN ASSEMBLED TO BACKPLANE INSULATOR, CONTACTS MUST SEAT FLUSH WITH INSULATOR TOP SURFACE TO A MAXIMUM ALLOWABLE GAP OF 0.25.

NOTES: ①. POLARIZING PIN MUST ALIGN AS INDICATED BY PART NUMBER CODE. (SEE TABLE 4) TO INSURE PROPER ALIGNMENT, THE OCTOGONAL BASE PORTION OF THE PIN MUST BE POSITIONED INTO THE CORRESPONDING MOLDED CAVITY.

3.00
Ø0.20
D M

K X 2.00 = (L)
SEE TABLE 1

1.01

21.6

11.75

6.87

7 X 2.25 = (15.75)

5.41

K X 2.00 = (L)
SEE TABLE 1

P

0.55

3.68
Ø0.30 M A C B

0.25

SHIELD MATING SURFACE

INSULATOR
SEE TABLE 1

DETAIL B
SCALE 15/1

0.40
Ø0.35 A B

CONTACT MATING SURFACE

SEE DETAIL B

SHIELD HEIGHT
SEE TABLE 3

CONTACT LENGTH
SEE TABLE 2
SEE DETAIL U

0.55

M

SEE DETAIL A

0.25 MAX.

2.64

DETAIL A
SCALE 10/1

0.20 SQ.
Ø0.25 F E G

18.85

GUIDE PIN

POLARIZING PIN

0.40
Ø0.40 A C

N
SEE TABLE 5

12.3

6.5

2.5
(TAIL LENGTH)

15.75

0.12 SQ.
Ø0.25 F E G

SECTION Z-Z

ZONE

REV

SCR NO.

DESCRIPTION

BY

DATE

APPROVED

A

29626

ADDED CONTACT LOAD 4 = 5.15

JSG

12/17/99

J. DUNHAM

B

40858

COMPLETE REDRAW

SG

1/23/03

W.LI

C

WLII-5UHLXM.VER02

REVISE DATUMS, ADD TABLE 6

SG/ML

1/22/04

W.LI

D

KLEC-66RSHX.VER01

ADDED NOTES 17 & 18

SG

9/18/04

LEBLANC

E

DMAG-6BTGKT.VER01

ADDED LEAD FREE PLATING OPTION

GKR

05/13/05

S.BAIR

F

SBAR-6NLKJT.VER01

MODIFIED TABLES 2 & 3

HCL

05/08/06

K.LEBLANC

G

CSAS-6QYKSW.VER01

CORRECTED P/Ns IN TABLE 1 & STD POL PIN P/N IN TABLE 5

HCL-CY

06/22/06

C.SAMMIS

H

MCHU-6U9JW.J.VER01

NOTE 7 UPDATED

HCL-AP

11/12/06

K.LEBLANC

J

KLEC-6VRLRW.VER01

DIM M WAS 19.00 AND 49.00 RESP

HCL-RK

12/07/06

K.LEBLANC

K

KLEC-6XBBZ6.VER01

ADDED “P” DIM IN TOP VIEW

HCL-BS

01/15/07

K.LEBLANC

ALL

L

CSAS-82ZPTE.VER01

ADDED NEW PART NUMBERS FOR NEW PLATING CODES IN ASSEMBLY PART NUMBER ASSIGNMENT TREE. MODIFIED NOTES 6, 7 & 18 AND REMOVED NOTE 16. REMOVED TABLE 6.

HCL-GM

03/01/2010

C.SAMMIS

TOLERANCES

DESIGN 11/9/99

J. GIROUX

0.0 ±0.25

DRAWN 2/10/99

J. GIROUX

0.00 ±0.13

CHK 4/2/99

T. DO

0.000 ± -

APVD 4/2/99

C. MURPHY

ANGLES ± -

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM. DECIMAL MARKER IS A PERIOD

CUSTOMER USE
DRAWING

INTERPRET PER ASME Y14.5M

CODE IDENT 314/13

DESIGN NO. C-499-5100-500

SH 1

REV L

Amphenol TCS
A Division of Amphen

