

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	CHANGES PER ECR-075261	30MAY18	S.B.
C1	CHANGES PER ECR-092664	13FEB20	J.AUSTRIA

NOTES:

MATERIALS; ROGERS 4350, FR-4, IN ACCORDANCE WITH IS410 (LATEST REV.). GLASS FABRIC BASE, EPOXY RESIN, FIRE RESISTANT.

BONDING AGENT; PREIMPREGNATED B STAGE EPOXY GLASS CLOTH IN ACCORDANCE WITH IPC-L-109 (LATEST REV.).

CLADDING; EXTERNAL LAYERS 1/2 OZ. COPPER, OVERPLATE TO 1 1/2 OZ. INTERNAL SIGNAL LAYERS 1 OZ. COPPER. INTERNAL PLANE LAYERS 1 OZ. COPPER.

SOLDER MASK; SHALL BE LIQUID PHOTOIMAGABLE (LPI) APPLIED ON BOTH SIDES OVER BARE COPPER AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3. COLOR: BLUE.

SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR WHITE.

U.L. RATING; 94VO MINIMUM.

FABRICATION:

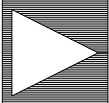
- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
- UNDIMENSIONED HOLES TO BE LOCATED WITHIN +/- .005 OF THEIR TRUE POSITION WITH RESPECT TO ARTWORK.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
- HOLE DIAMETERS APPLY AFTER PLATING.
- FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL, INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
- MINIMUM DESIGN LINE WIDTH IS .005 INCH.
- MINIMUM DESIGN SPACING IS .005 INCH.
- BOARD/PANEL MUST MEET IPC-A-600 (LATEST REV.) CLASS 2 FOR FLATNESS.
- MFGR. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;
 - A. U.L. CODE
 - B. DATE CODE (STAMP)
 - C. FLAMMABILITY RATING
 - D. MFGR. LOGO
 - E. SUCCESSFUL ELECTRICAL BOARD TEST.
- NON-FUNCTIONAL PADS MAY BE REMOVED FROM INNER SIGNAL LAYERS AT MFGR. DISCRETION.
- IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFGR. MAY TEAR DROP PADS TO MAINTAIN ANNULAR RING AT PAD TO CIRCUIT INTERFACE ONLY AND MUST INSURE ELECTRICAL INTEGRITY.
- REPAIRS PER IPC-R-700 ARE ALLOWED.
- MODIFICATIONS TO THE ARTWORK, OTHER THAN THOSE DESCRIBED ON THE FABRICATION DRAWING, ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
- FINISH: SURFACES SHALL HAVE ENIG FINISH PLATED WITH 2-6 MICROINCHES OF IMMERSION GOLD OVER 100-200 MICROINCHES OF ELECTROLESS NICKEL.
- INDICATED VIAS TO BE NON-CONDUCTIVE EPOXY FILLED, AND GROUND FLUSH PRIOR TO OVER PLATING.
- BOARDS TO BE PANELIZED AND SHIPPED INTACT.

12 LAYER STACKUP

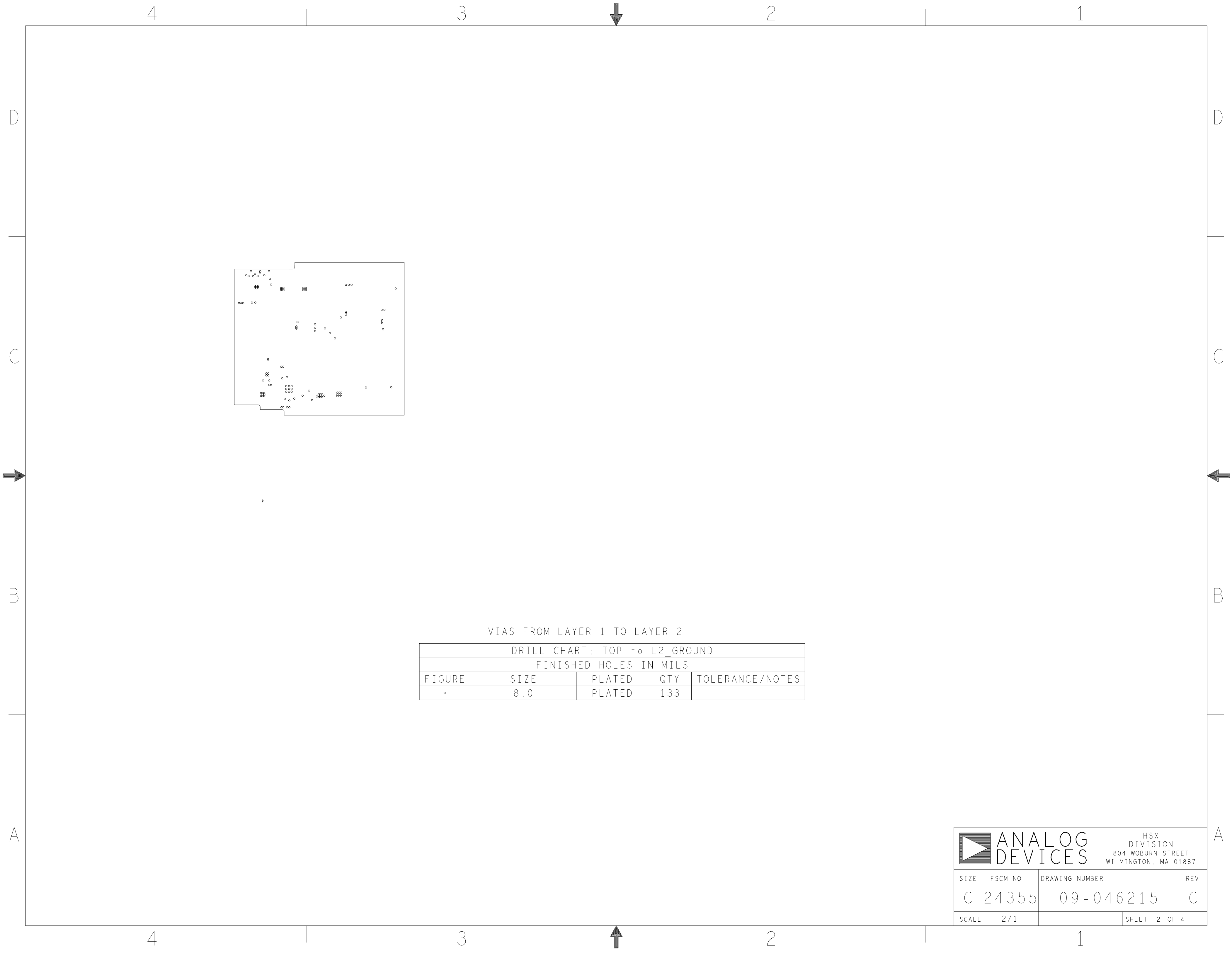
HOLE TOLERANCE

UNLESS SPECIFIED
PLATED: +/- .003
NON PLATED: +/- .001

DRILL CHART: TOP to BOTTOM				
FINISHED HOLES IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
*	5.0	PLATED	141	SEE NOTE 15
a	10.0	PLATED	342	SEE NOTE 15
B	12.0	PLATED	349	SEE NOTE 15
D	28.0	PLATED	5	
E	40.0	PLATED	7	
F	45.0	PLATED	8	
G	63.0	PLATED	1	
H	105.0	PLATED	2	
J	50.0	NON-PLATED	2	
0	75.0x28.0	PLATED	2	
0	83.0x28.0	PLATED	1	

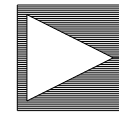
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			NCDRILL		 ANALOG DEVICES		HSX DIVISION 804 WOBURN STREET WILMINGTON, MA 01887			
TOLERANCES										
DECIMALS	FRACTIONS	ANGLES								
.XX -.010	--1/32	+/- 2								
.XXX -.005										
			APPROVAL		DATE		TITLE			
MATERIAL			DRAWN BY		W.D.B.		05MAY15			
			DESIGNED				AD9162-FMC Z EVALUATION BOARD			
			CHECKED							
FINISH			APPROVED						SIZE	
			MFG ENGINEER				FSCM NO			
							DRAWING NUMBER			
							09-046215		REV	
							C		C	
DO NOT SCALE DWG					SCALE		2/1		SHEET 1 OF 4	

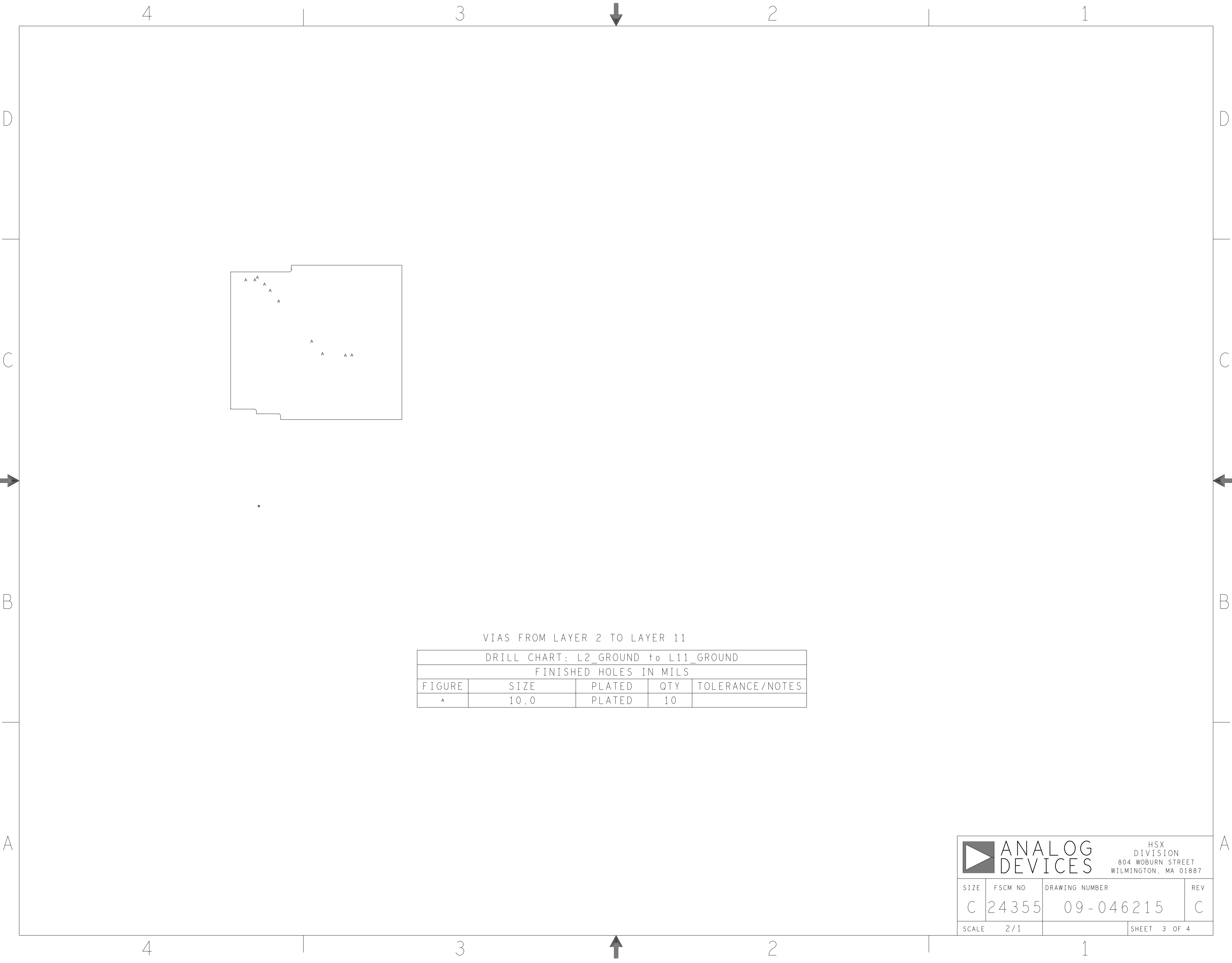
CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = .0008"
DIFFERENTIAL IMPEDENCE 100 OHMS +/- 10%
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = .0005"



VIAS FROM LAYER 1 TO LAYER 2

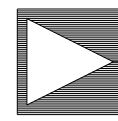
DRILL CHART: TOP to L2_GROUND				
FINISHED HOLES IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	8.0	PLATED	133	

		ANALOG DEVICES		HSX DIVISION 804 WOBURN STREET WILMINGTON, MA 01887	
SIZE	FSCM NO	DRAWING NUMBER		REV	
C	24355	09-046215		C	
SCALE	2/1			SHEET 2 OF 4	



VIAS FROM LAYER 2 TO LAYER 11

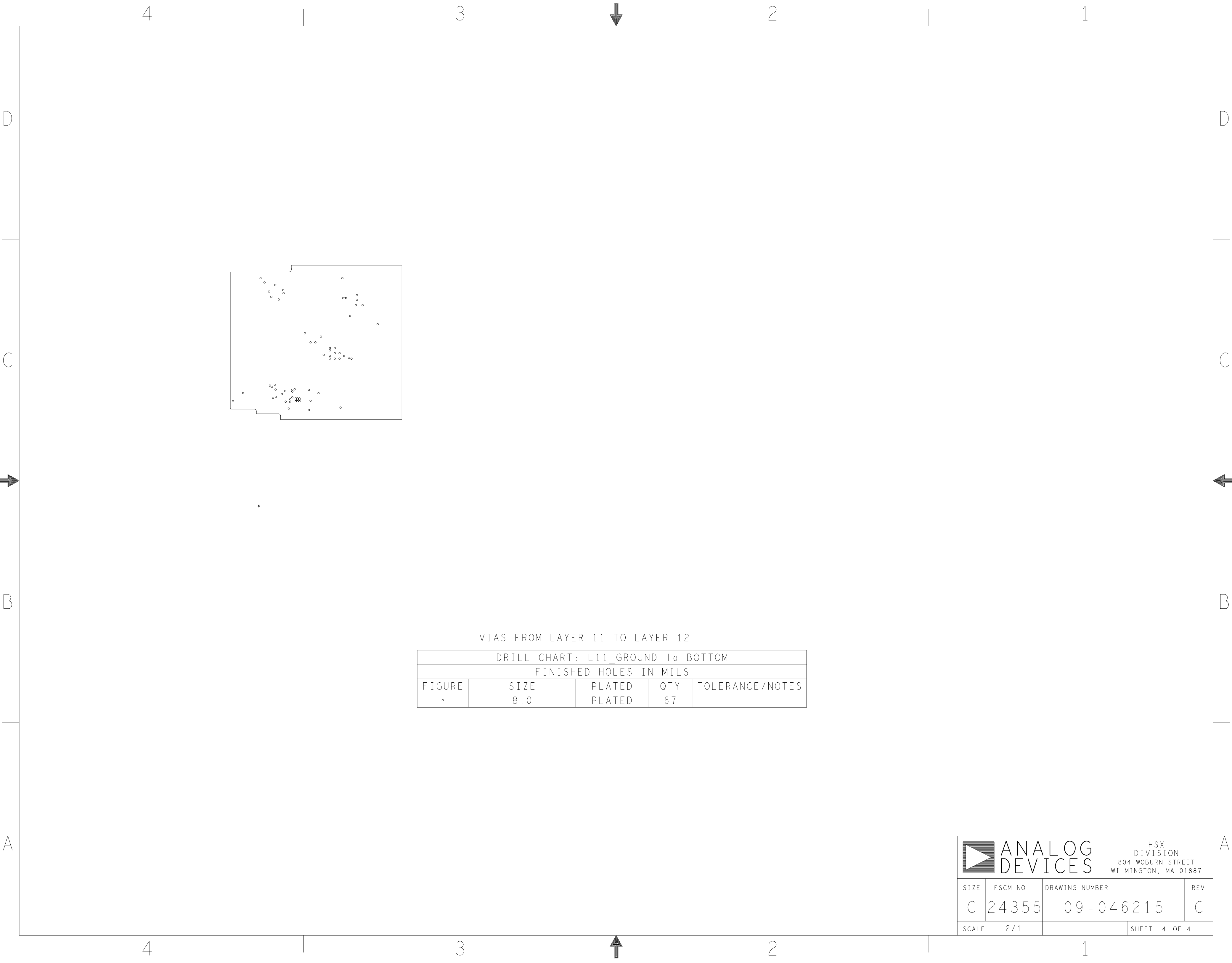
DRILL CHART: L2_GROUND to L11_GROUND				
FINISHED HOLES IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
A	10.0	PLATED	10	



ANALOG
DEVICES

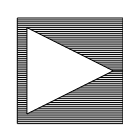
HSX
DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-046215	C
SCALE	2/1		SHEET 3 OF 4



VIAS FROM LAYER 11 TO LAYER 12

DRILL CHART: L11_GROUND to BOTTOM				
FINISHED HOLES IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	8.0	PLATED	67	



ANALOG
DEVICES

HSX
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804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	09-046215	C
SCALE	2/1		SHEET 4 OF 4