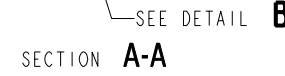
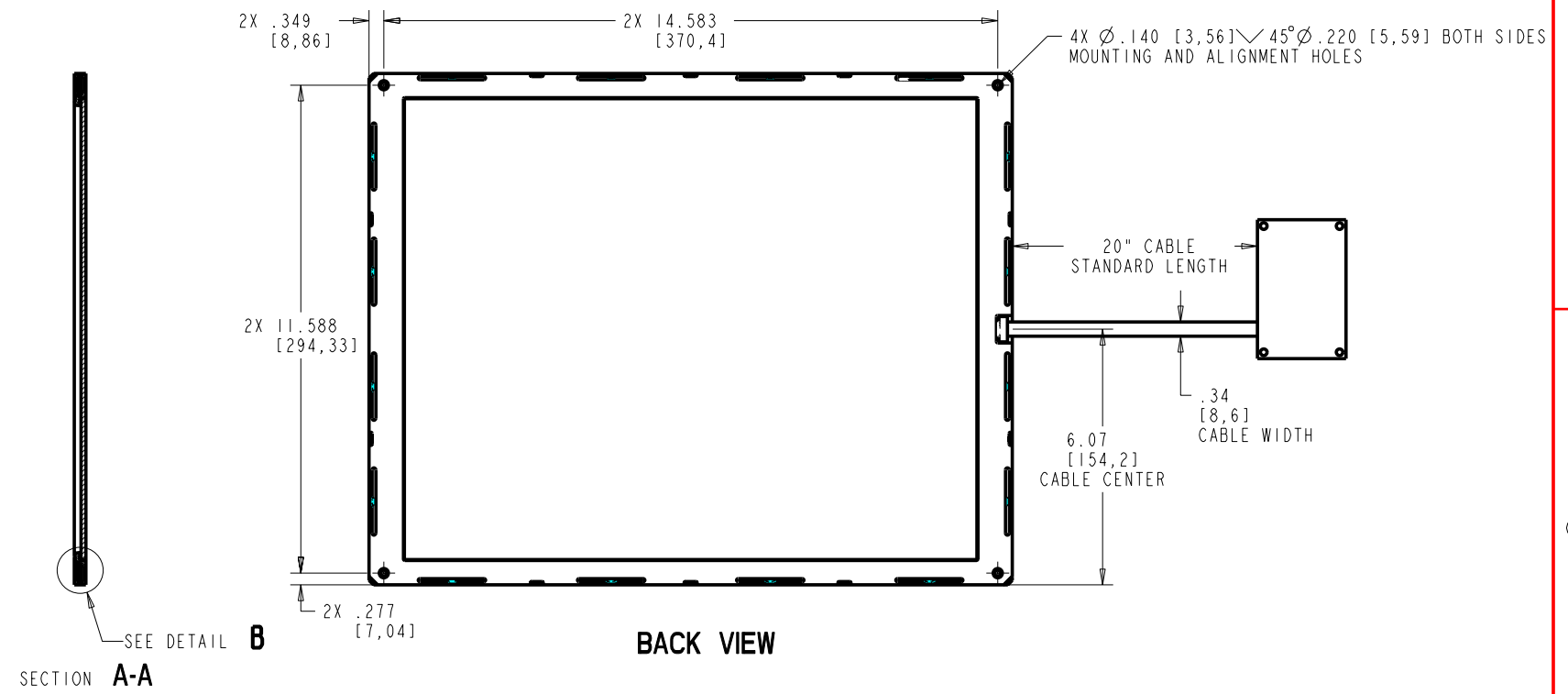
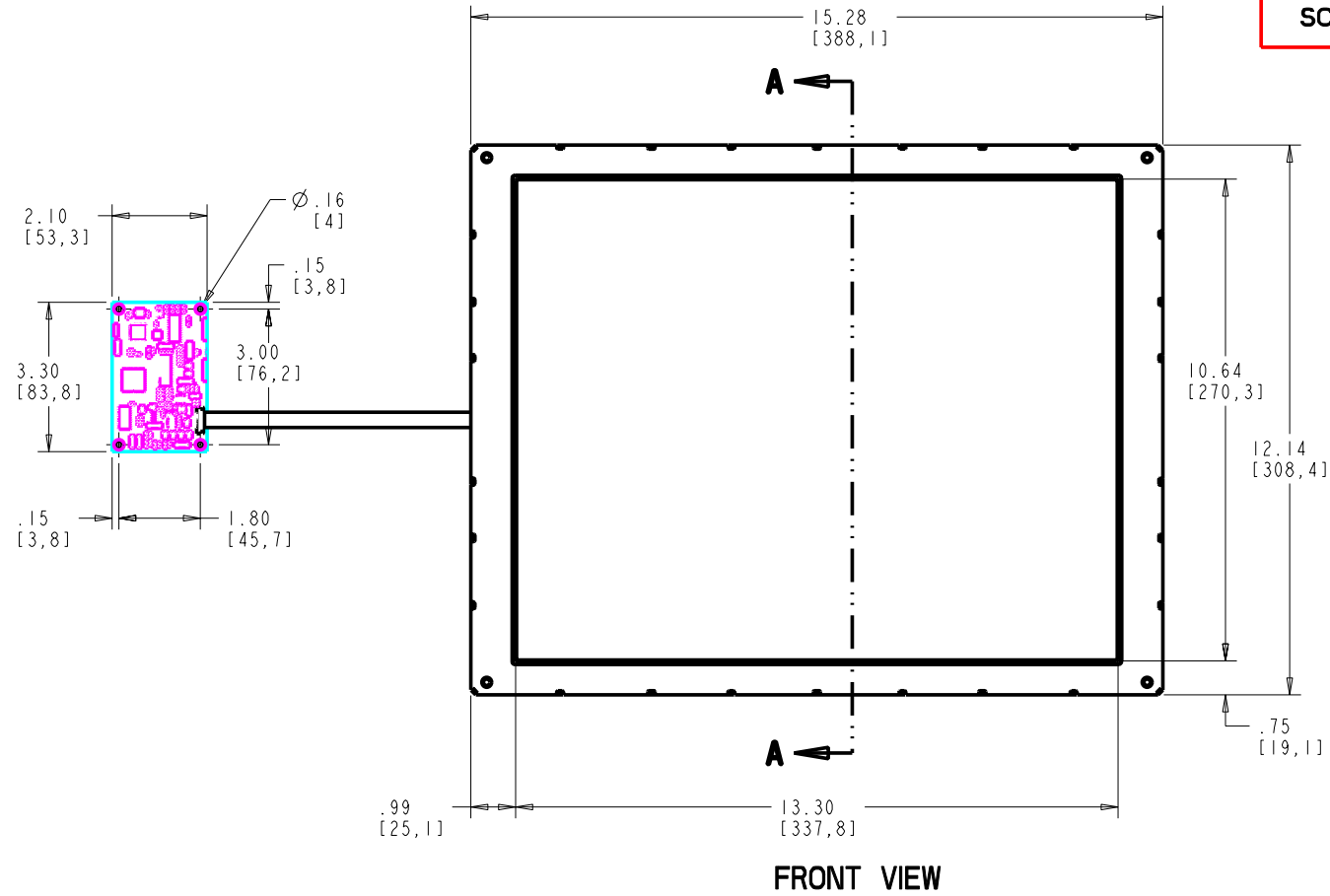


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CARROLL TOUCH TOUCHSCREEN

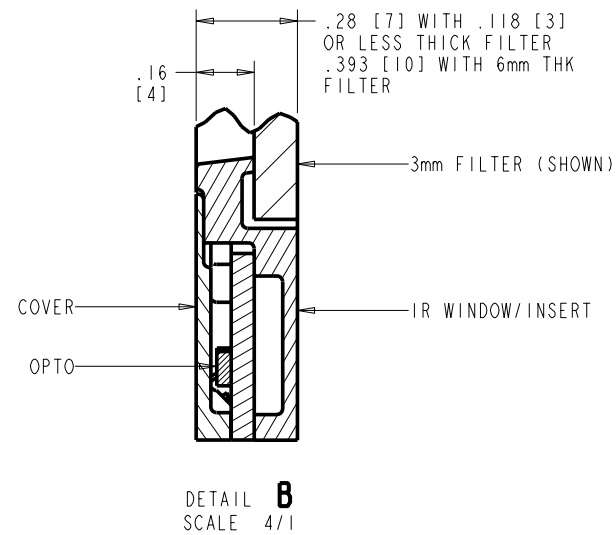
SCN-CT-FLT17.0-ODX-OXX-L-R

REVISIONS					
REV	ZONE	BY	DESCRIPTION	DATE	APPROVED
A	--	HAG	RELEASED PER ECO 5899	05.02.06	CCB



PIN OUT FOR P2 CONNECTOR ON CONTROLLER			
SIGNAL NAME	DB-9 PIN	P2 PIN	SOURCED BY
-DCD	1	1	ctrl
-DSR	6	2	ctrl
RXD	2	3	ctrl
-RTS	7	4	host
TXD	3	5	host
-CTS	8	6	ctrl
-DTR	4	7	host
RI	9	8	n/u
SG	5	9	com
n/u	n/c	10	n/u

PIN OUT FOR P4 CONNECTOR ON CONTROLLER		
SIGNAL NAME	P4 PIN	SIGNAL FUNCTION
+REGULATED PWR	1	+5 VOLTS DC +/-5%
PWR COM	2	SUPPLY VOLTAGE NEGATIVE
RESERVED	3	NO CONNECTION ALLOWED
PWR COM	4	SUPPLY VOLTAGE NEGATIVE
LED REMOTE	5	
n/c	6	KEY LOCATION
n/c	7	
FRAME GROUND	8	
-RESET	9	OPEN = NORMAL OPERATION SHORT TO PWR COM = HARDWARE RESET
RESERVED	10	NO CONNECTION ALLOWED



POTENTIAL DISPLAYS AND MEASUREMENTS					
MANUFACTURER	DISPLAY MODEL	ACTIVE AREA X	ACTIVE AREA Y	OUTSIDE X	OUTSIDE Y

PIP NUMBER	DESCRIPTION	FILTER TYPE
F84565-001	SCN-CT-FLT17.0-OD4-000-L-R	FILTERLESS
E74670-001	SCN-CT-FLT17.0-OD2-001-L-R	3mmTHK, ANTI-GLARE GLASS FLTR
D27566-001	SCN-CT-FLT17.0-OD2-003-L-R	3mm THICK, ACRYLIC FILTER
E13816-001	SCN-CT-FLT17.0-OD3-001-L-R	3mmTHK, ANTI-GLARE, TEMPERED GLASS FLTR
D04942-001	SCN-CT-FLT17.0-OD2-016-L-R	6mmTHK, ANTI-GLARE, TEMPERED GLASS FLTR

NOTES: UNLESS OTHERWISE SPECIFIED

ITEM NO.	QTY REQ'D	DRAWING OR PART NO.	DESCRIPTION	MATERIAL SPECIFICATION										
PARTS LIST														
PART. NO. SEE CHART		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MILLIMETERS	DRAWN A. GRICE DATE 04.10.06	TITLE MTKG DWG. SCN-CT-FLT17.0-ODX-OXX-L-R										
METRIC		TOLERANCES ARE:	CHECK DATE											
DO NOT SCALE DRAWING		DECIMALS: ±0.50 ANGLES: ±1/2° FRACTIONS: ±0.25 XX: ±0.13	DESIGN A. GRICE DATE 04.10.06											
THIRD ANGLE PROJECTION			<table border="1"> <tr> <th>SIZE</th> <th>SCALE</th> <th>SHEET</th> <th>DWG. NO.</th> <th>REV</th> </tr> <tr> <td>D</td> <td>1/2</td> <td>1 OF 4</td> <td>MS600373</td> <td>A</td> </tr> </table>		SIZE	SCALE	SHEET	DWG. NO.	REV	D	1/2	1 OF 4	MS600373	A
SIZE	SCALE	SHEET	DWG. NO.	REV										
D	1/2	1 OF 4	MS600373	A										

SHT. OF 4 REV A



MS600373

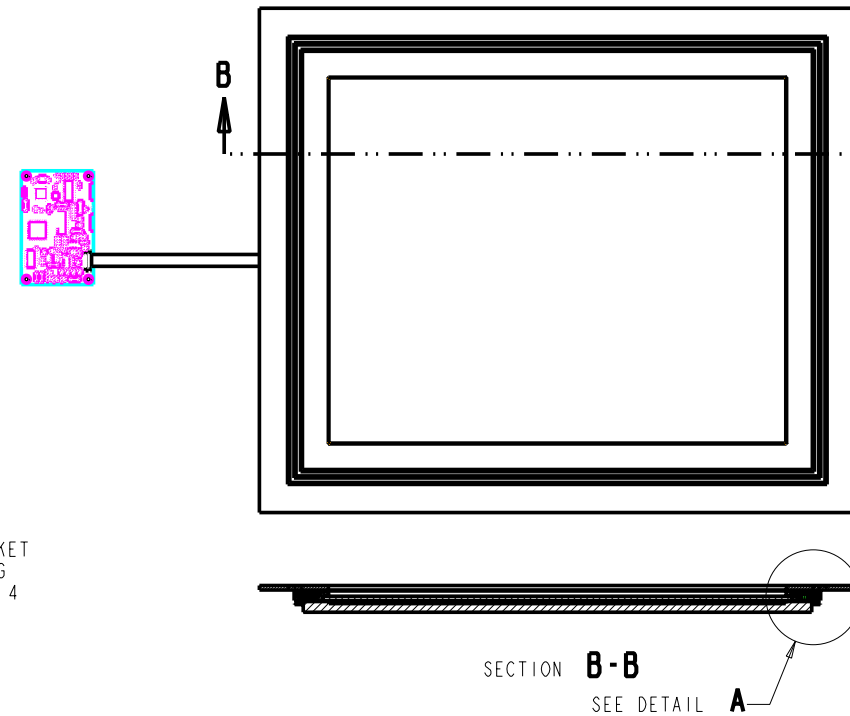
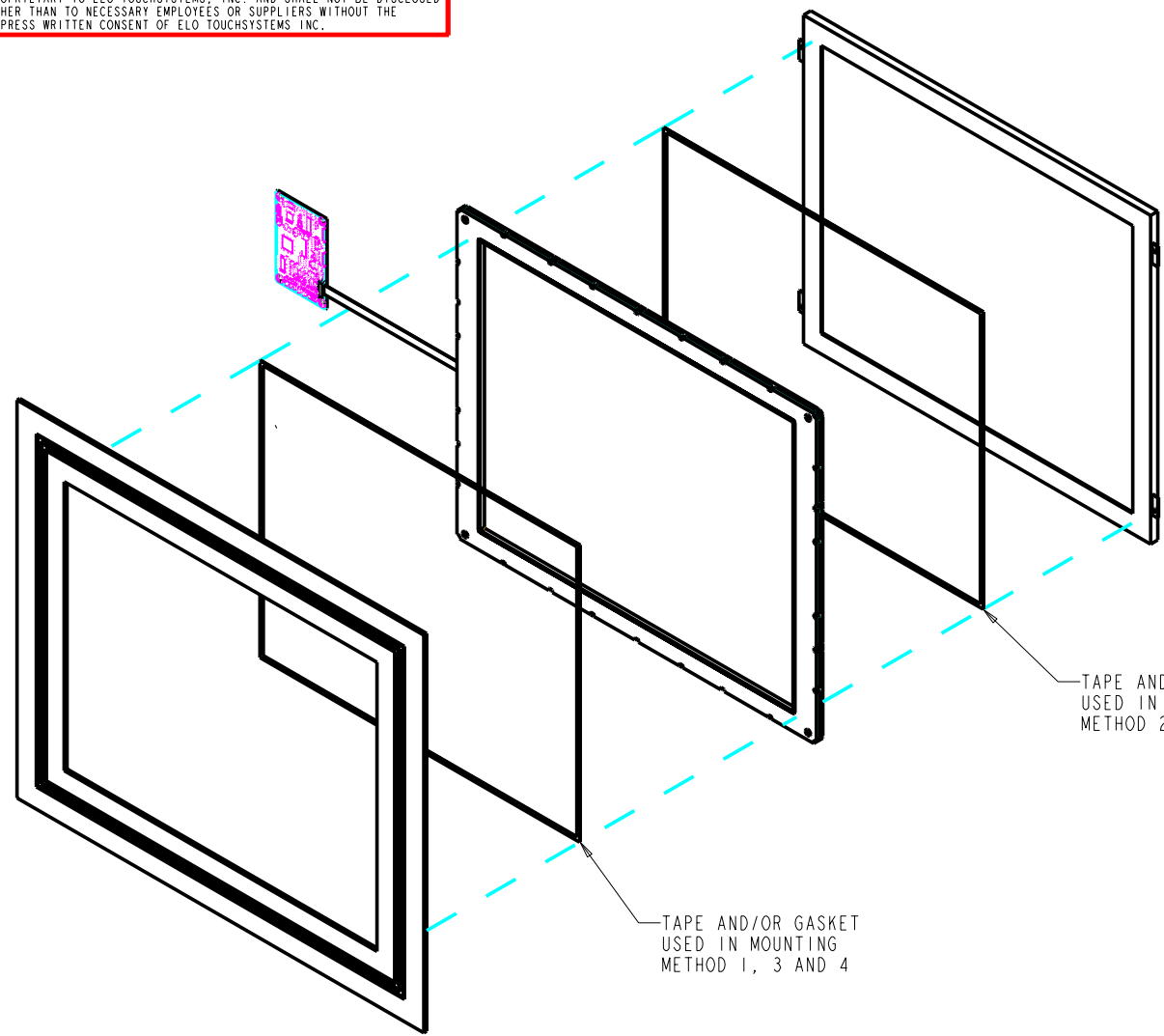
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CARROLL TOUCH TOUCHSCREEN

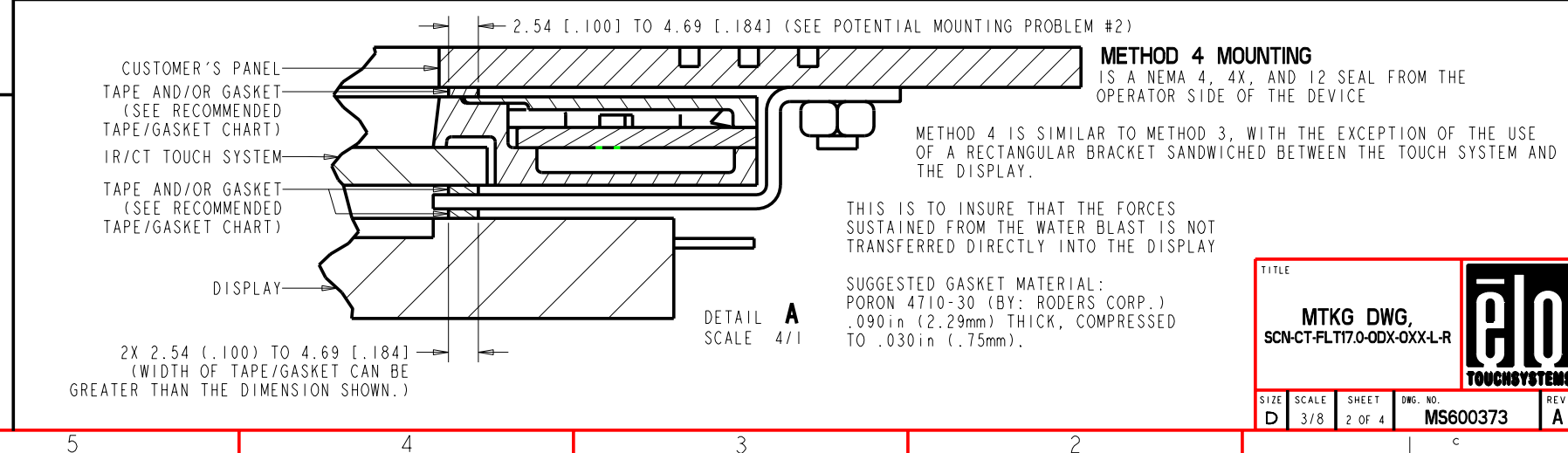
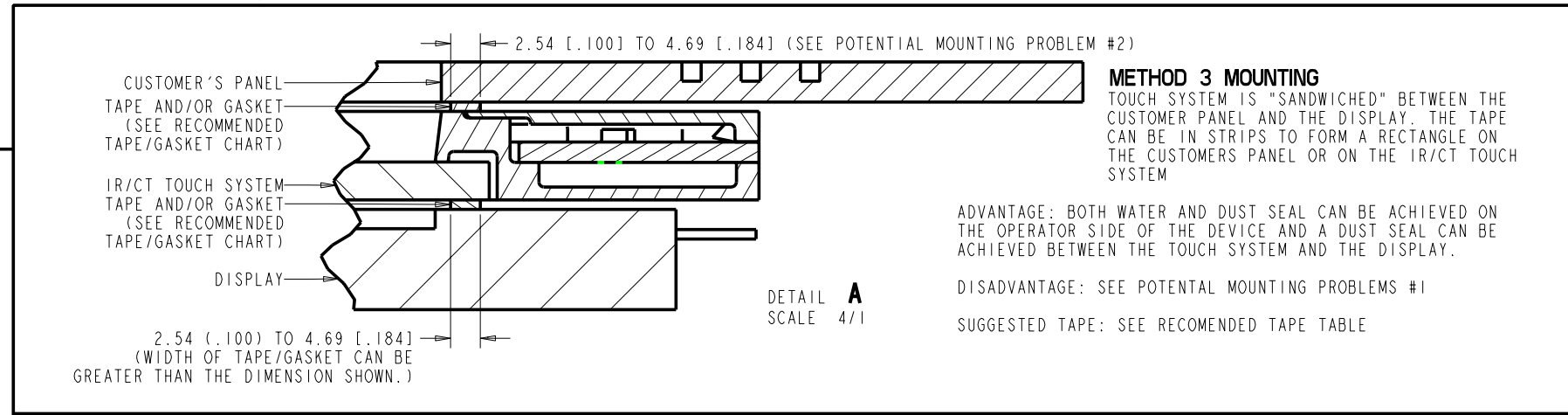
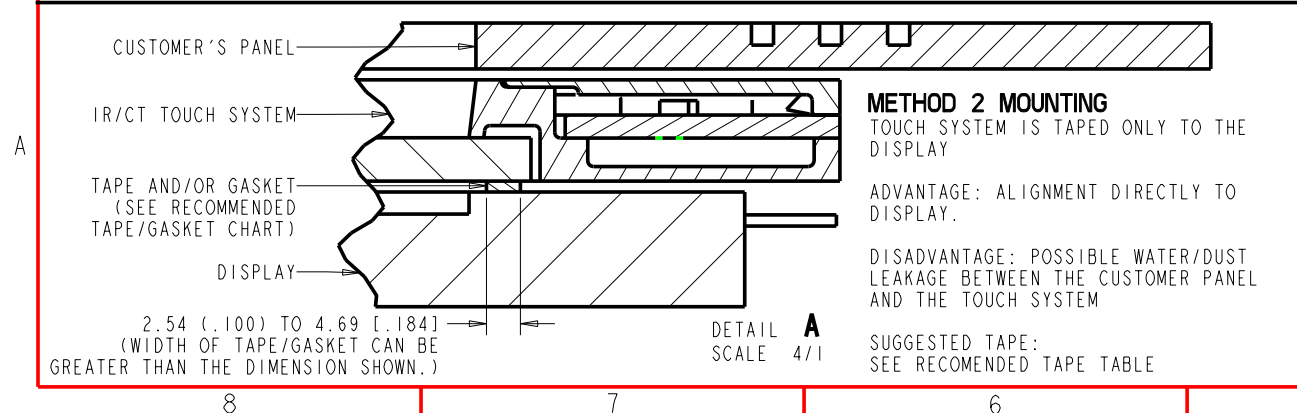
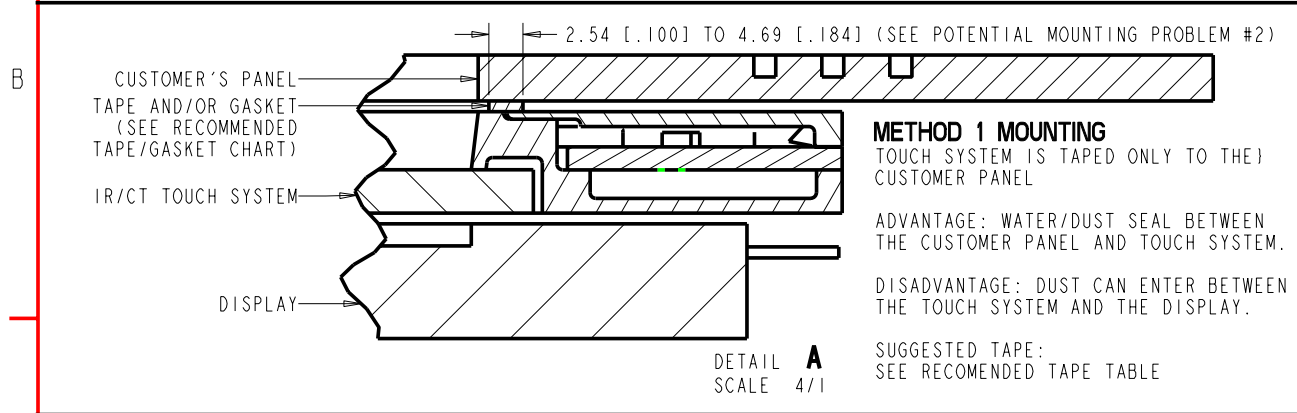
SCN-CT-FLT17.0-ODX-OXX-L-R

MOUNTING METHODS



RECOMMENDED TAPES/GASKETS				
BETWEEN CUSTOMER PANEL AND TOUCH SYSTEM (DOUBLE AND SINGLE SIDED ADHESIVE TAPE)				
MOUNTING METHOD	MFG	MFG PART NUMBER	THICKNESS	COMPRESSED THICKNESS
1, 2 AND 3	3M	9500PL	.005 in (0.13 mm)	.005 in (0.13 mm)
	3M	4920	.015 in (0.4 mm)	.015 in (0.4 mm)
	EASTERN	2032AB	.032 in (0.8 mm)	.025 in (0.64 mm)
4	ROGERS CORP	4701-30	.09 in (2.29 mm)	.03 in (0.76 mm)
BETWEEN DISPLAY AND TOUCH SYSTEM (SINGLE SIDED ADHESIVE TAPE ONLY)				
MOUNTING METHOD	MFG	MFG PART NUMBER	THICKNESS	COMPRESSED THICKNESS
2, 3 AND 4	ROGERS CORP	4701-30	.09 in (2.29 mm)	.03 in (0.76 mm)

NOTE: WHEN EVER APPLICABLE THE GASKET SHOULD BE MOUNTED TO THE TOUCH SYSTEM, FOR EASE OF INSTALLATION.



TITLE

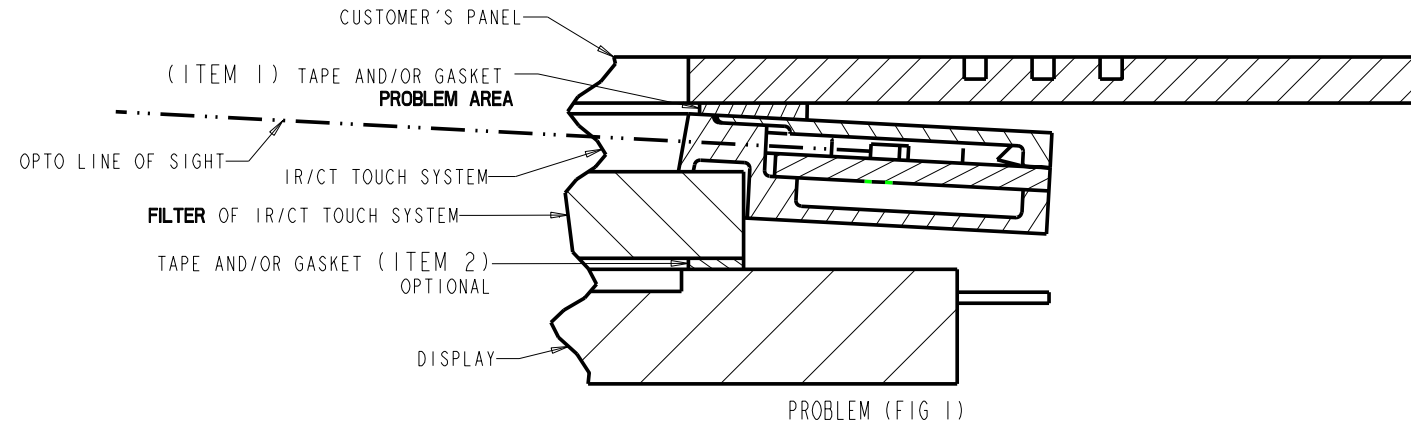
**MTKG DWG,
SCN-CT-FLT17.0-ODX-OXX-L-R**

SIZE	SCALE	SHEET	DWG. NO.	REV
D	3/8	2 OF 4	MS600373	A

SHT 2 OF 4 REV A

POTENTIAL MOUNTING PROBLEMS

POTENTIAL MOUNTING PROBLEM #1



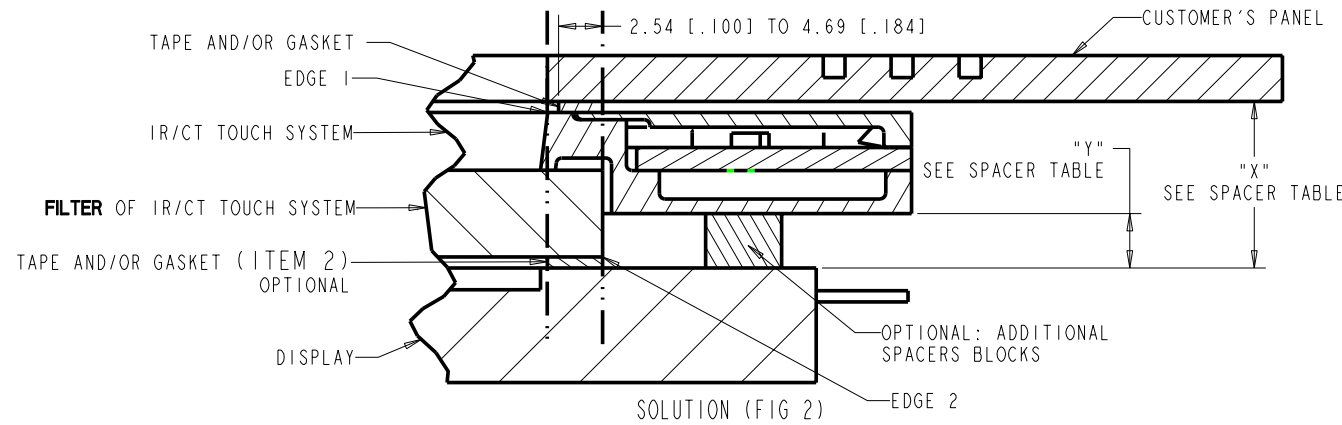
GASKET (ITEM 1) TOO WIDE

PROBLEM (FIG 1): WHEN THE FILTER IS GREATER THAN 3mm IN THICKNESS A SPACE IS CREATED BETWEEN THE PLASTIC PART OF THE TOUCH SYSTEM AND THE DISPLAY. THUS, THE PROPER OPTO ALIGNMENT IS NOT ACHIEVED DUE TO EXTRA WIDTH OF TAPE/GASKET MOUNTED TO THE CUSTOMER PANEL. SEE SOLUTIONS BELOW.

SPACER TABLE FOR FIG 2

DISTANCE "X"	SPACER LENGTH "Y"
7mm	3mm
8mm	4mm
9mm	5mm

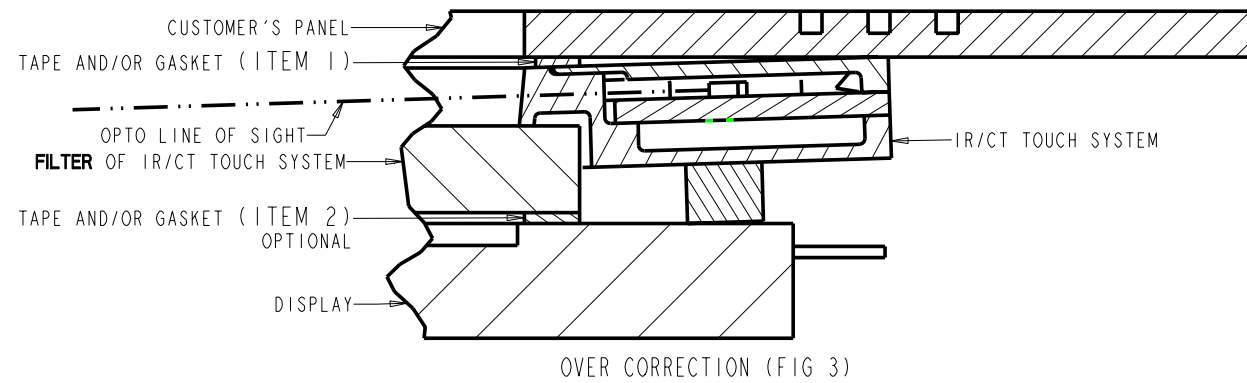
* PROVIDES .5mm OVER CORRECTION WHICH SLIGHTLY ENHANCES OPTICAL SIGNAL



SOLUTION (FIG 2)

SOLUTION (FIG 2): MAKE THE GASKET (ITEM 1) SO THAT THE INSIDE OPENING DOES NOT PROTRUDE PAST THE EDGE OF THE TOUCH SYSTEM (EDGE 1) WHEN COMPRESSED AND THE OUTER OPENING LINES UP WITH THE OUTER EDGES OF THE FILTER (EDGE 2).

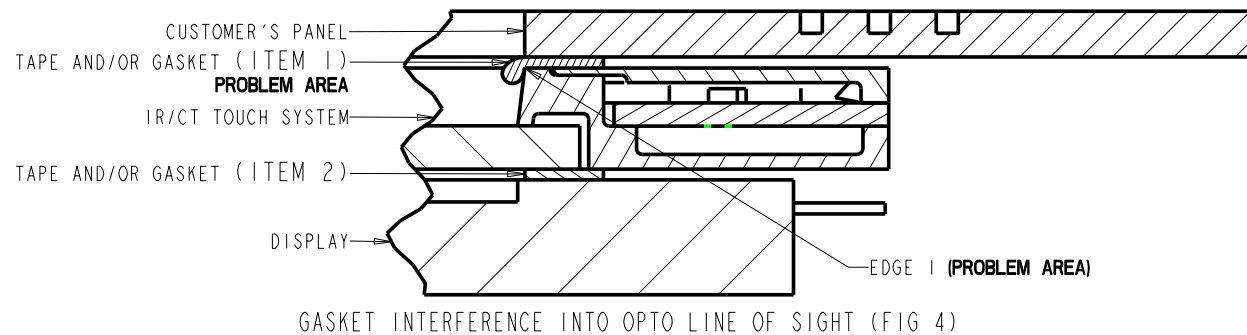
RECOMMENDED SPACER INSTALLATION WITH THE SOLUTION
SEE TABLE FOR SPACER LENGTH.



OVER CORRECTION (FIG 3)

SPACER INSTALLATION MAY CAUSE SLIGHT OVER CORRECTION OF OPTO LINE OF SIGHT (FIG 3). CORRECTION SHOULD BE LESS THAN 1mm.

POTENTIAL MOUNTING PROBLEM #2



GASKET INTERFERENCE INTO OPTO LINE OF SIGHT (FIG 4)

PROBLEM (AS SEEN IN FIG 4)
1) WHEN THE GASKET IS COMPRESSED IT MAY BLEED OVER INTO THE LINE OF SIGHT OF THE OPTO'S CAUSING SIGNAL OBSTRUCTION.
2) WHEN THE GASKET IS COMPRESSED IT MAY BE CUT, BY EDGE 1 OF THE TOUCH SYSTEM TEARING THE GASKET AND CAUSING WATER LEAKAGE.

SOLUTION: SET THE GASKET AWAY FROM EDGE 1 ABOUT .5mm TO 1mm (AS SEEN IN FIG 3) TO PROVIDE OPTIMUM GASKET EXPANSION DURING COMPRESSION WITHOUT BLEEDING OVER EDGE 1 INTO THE OPTO'S LINE OF SIGHT OR CUT GASKET OFF SO OPTO LINE OF SIGHT IS NOT OBSTRUCTED.

TITLE				
MTKG DWG, SCN-CT-FLT17.0-ODX-OXX-L-R				
SIZE	SCALE	SHEET	DWG. NO.	REV
D	1/2	3 OF 4	MS600373	A

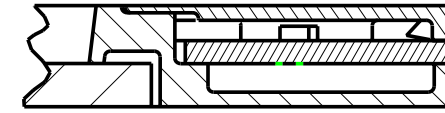
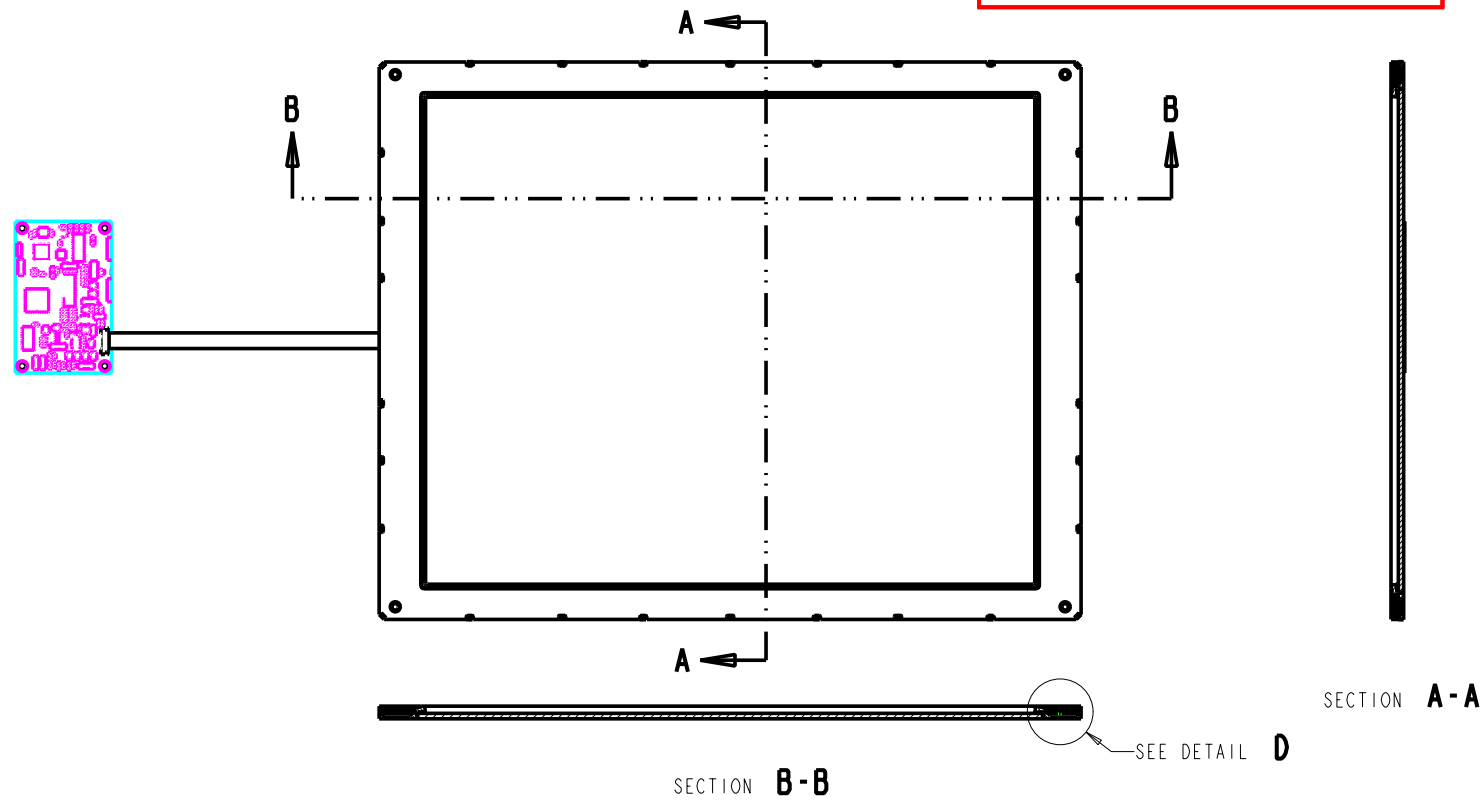
SHT 3 OF 4 REV A

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CARROLL TOUCH TOUCHSCREEN

SCN-CT-FLT17.0-ODX-OXX-L-R

**ADHERING A FILTER TO A
NO-FILTER CT TOUCH SYSTEM**



DETAIL **D**
SCALE 4/1

STEP 1

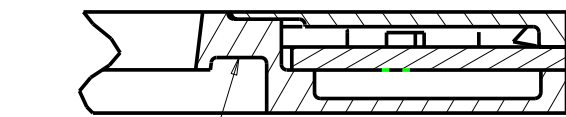
APPLY ADHESIVE AND FILTER IN ACCORDANCE TO
CT SPECIFICATION 2000-0375. SEE FIGURE 1.
FILTER SIZE FOR THE 17LP IS
10.94 [277,9] X 13.60 [345,4]

STEP 2

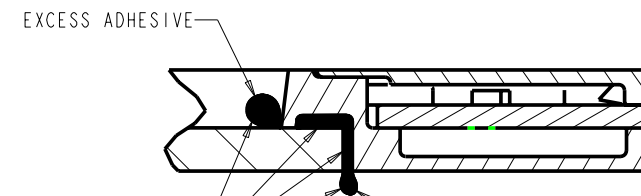
AFTER CURING REMOVE EXCESS ADHESIVE FROM
ASSEMBLY IN ACCORDANCE TO SPECIFICATION
CT 2000-0375
SEE FIGURE 2.

STEP 3

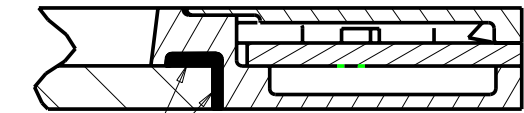
THE FINAL ASSEMBLY SHOULD LOOK
LIKE FIGURE 4.



APPLY ADHESIVE
AND FILTER
FIGURE 1



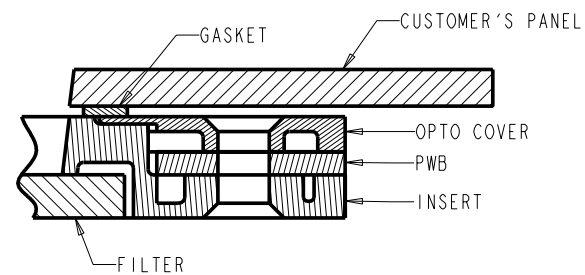
EXCESS ADHESIVE
CURED ADHESIVE
EXCESS ADHESIVE
FIGURE 2



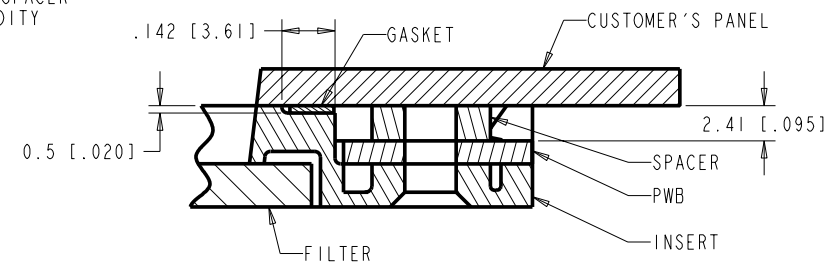
CURED ADHESIVE
FIGURE 3

**MOUNTING THE TOUCH SYSTEM USING
ALIGNMENT HOLES AND NO COVER**

MAY BE ACHIEVED BY THE USE OF A SPACER
TO OBTAIN THE STABILITY, RIGIDITY
AND PROPER OPTO ALIGNMENT.



CROSS SECTION OF THE DESIGN CONFIGURATION
WITH THE OPTO COVER INSTALLED.



CROSS SECTION OF THE DESIGN CONFIGURATION
WITH THE OPTO COVER REMOVED AND SPACER INSTALLED.

TITLE
MTKG DWG,
SCN-CT-FLT17.0-ODX-OXX-L-R



SIZE	SCALE	SHEET	DWG. NO.	REV
D	1/2	4 OF 4	MS600373	A

SHT 4 OF 4 REV A